50862
57414

Maya Iconography

Elizabeth P. Benson and Gillett G. Griffin, EDITORS

7.04

EX LIBRIS

PRINCETON UNIVERSITY PRESS, PRINCETON, NEW JERSEY

UNIVERSIDAD NACIONAL DE EDUCACION A DISTANCIA

Copyright © 1988 by Princeton University Press
Published by Princeton University Press, 41 William Street,
Princeton, New Jersey 08540
In the United Kingdom: Princeton University Press,
Guildford, Surrey

ALL RIGHTS RESERVED

Library of Congress Cataloging-in Publication Data

Maya iconography / Elizabeth P. Benson and
Gillett G. Griffin, editors.
p. cm.
Bibliography: p. Includes index.
ISBN 0-691-03590-3 (alk. paper)
1. Mayas—Art. 2. Mayas—Antiquities. 3. Indians of
Mexico—Art. 4. Indians of Central America—Art.
5. Indians of Mexico—Antiquities. 6. Indians of Central
America—Antiquities. 7. Mexico—Antiquities.
8. Central America—Antiquities. I. Benson,
Elizabeth P. II. Griffin, Gillett G. (Gillett Good), 1928-
F1435.3.A7M27 1988
972.8'01—dc19 87-26372

This book has been composed in Linotron Aldus

Clothbound editions of Princeton University Press books
are printed on acid-free paper, and binding materials are
chosen for strength and durability. Paperbacks, although
satisfactory for personal collections, are not usually
suitable for library rebinding

Printed in the United States of America by
Princeton University Press
Princeton, New Jersey

Contents

List of Illustrations vii

Notes on Contributors xv

Introduction 3

1. Proto-Maya Aspects of Miraflores-Arenal Monumental Stone Sculpture from Kaminaljuyu and the Southern Pacific Coast
LEE A. PARSONS 6

2. Symbol and Power: A History of the Lowland Maya Cosmogram
DAVID FREIDEL AND LINDA SCHELE 44

3. The Pomona Flare: A Preclassic Maya Hieroglyphic Text
JOHN S. JUSTESON, WILLIAM M. NORMAN, AND NORMAN HAMMOND 94

4. Early Maya Iconography on an Incised Cylindrical Tripod
NICHOLAS M. HELLMUTH 152

5. Blood Symbolism in Maya Iconography
DAVID STUART 175

6. Ideology of the Maya Tomb
MICHAEL D. COE 222

7. Some Observations on Maya Vase Painters
BARBARA AND JUSTIN KERR 236

8. A Ceramic Codex Fragment: The Sacrifice of Xbalanque
FRANCIS ROBICSEK AND DONALD HALES 260

9. Skyband Representations in Classic Maya Vase Painting
JOHN B. CARLSON 277

10. The Xibalba Shuffle: A Dance after Death
LINDA SCHELE 294

11. The Boys in the Bonampak Band
MARY E. MILLER 318

12. A Study of Classic Maya Scaffold Sacrifice
KARL A. TAUBE 331

Bibliography 352

Index 371

List of Illustrations

CHAPTER 1

1.1 Monte Alto Monument 3, Escuintla. *13*
1.2 Kaminaljuyu Monument 17. *13*
1.3 Kaminaljuyu Altar 10. *14*
1.4 El Mirador Stela 2, El Peten, Guatemala. Back side. *17*
1.5 Kaminaljuyu Monument 63. *17*
1.6 Kaminaljuyu Stela 25. Fragment. *17*
1.7 Kaminaljuyu Stela 22. Fragment. *19*
1.8 Kaminaljuyu Altar 1. Fragment. *19*
1.9 Kaminaljuyu Silhouette Relief 4. *21*
1.10 Kaminaljuyu Stela 21. Mid-section fragment. *21*
1.11 Kaminaljuyu Altar 2. *21*
1.12 Kaminaljuyu Silhouette Relief 2. *23*
1.13 Kaminaljuyu Silhouette Relief 3. *23*
1.14 Kaminaljuyu Stela 11. *24*
1.15 Abaj Takalik Stela 3. Fragment, lower half. *25*
1.16 Kaminaljuyu Stela 26. Detail of carved base panel. *27*
1.17 Kaminaljuyu Stela 28. Detail, upper portion. *27*
1.18 Kaminaljuyu Stela 10. Three fragments. *29*
1.19 Chocola, stela fragment, Suchitepequez. *30*
1.20 Kaminaljuyu Silhouette Relief 1. Mid-section fragment. *31*
1.21 Kaminaljuyu Silhouette Relief 8. Two fragments. *33*
1.22 Kaminaljuyu Stela 2. Two parts of one monument. *33*
1.23 Bilbao Monument 42, Escuintla. Lower half of stela; part of the plain base out of view. *33*
1.24 Kaminaljuyu adobe architectural relief. *34*

CHAPTER 2

2.1 The Jester God. a. Upper head, Cerros Structure 5C–2nd. b. Greenstone mask, Tikal Burial 85. c. Dumbarton Oaks jade pectoral. d. Tikal Stela 29. e. Leiden Plaque. f. Tikal Stela 31. g. Palenque Oval Palace Tablet, left figure. h. Bonampak Sculpture Panel 1, verb for "seating on a jaguar throne" and the scene of accession. i. Palenque Temple of Inscriptions, east panel, "seating as *ahau*" (Jester God). j. *Ahau* written with Jester God scarf. *59*
2.2 a. Maya drawing from reused Olmec jade in the Dumbarton Oaks collection. b. Detail of ear-flare assemblage from the Dumbarton Oaks pectoral. c. Ear-flare assemblage from Cerros Structure 5C–2nd. *60*
2.3 Drawings, with some reconstruction, of the masks from Cerros Structure 5C–2nd. *61*
2.4 The royal headdress. a. Cerros Structure 5C–2nd. b. Leiden Plaque. c. Tikal Stela 2. *63*
2.5 The royal costume. a. Tikal Stela 2, head. b. Tikal Stela 1. c. Tikal Stela 2, hanging supernatural. d. West panel from the Temple of the Cross, Palenque. *65*
2.6 Drawing of stucco mask from Cerros Structure 29b. *68*
2.7 Greenstone figurine from Uaxactun Group A. *68*
2.8 GIII/Jaguar God heads. a. Tikal Stela 29. b. Leiden Plaque. c. Tikal Stela 4. d. Tikal Stela 18. e. and f. Tikal Stela 36. *69*
2.9 The Palenque Triad. a. Caracol Stela 16. b. Tikal Stela 26. c. Metropolitan Vase. *70*
2.10 GIII variants. a. Head held in the arm on Tikal Stela 31. b. Front belt head on Tikal Stela 31. c. Rear belt head on Tikal Stela 31. d. GIII from Tikal Stela 26. *71*

2.11 The transformation of the sky frame into the double-headed serpent bar. a. Tikal Stela 29. b. GIII heads from Tikal Stela 29. c. Lower masks from Cerros Structure 5C–2nd. d. Double-headed serpent bar from Tikal Stela 29. *74*
2.12 The Celestial Monster from the Classic period. a. Lower register of the center, upper stair of Yaxchilan Structure 44. b. Backrack detail from Step VIII, Yaxchilan Structure 33. *75*
2.13 a. The upper west and lower east masks from Cerros Structure 5C–2nd. b. Stucco mask and Sun God from Kohunlich. c. Mask from upper terrace, Kohunlich. d. and e. Cache vessel from Tikal. f. Deletaille, or Belgian, vessel. *77*
2.14 Reconstructed terraces on the north façade of the Palace at Palenque. *79*
2.15 Diagram of the contrasting features in the mask façades of Cerros Structure 5C–2nd. *81*
2.16 Transformations of the Late Preclassic program at Cerros into Classic analogues. *Set 1*: a. Upper heads from Cerros Structure 5C–2nd. b. Front head of the Celestial Monster. c. The iconic and anthropomorphic version of GI (after M. D. Coe 1973). d. Portrait head of GI used in glyphic expressions. *Set 2*: e. Lower heads from Cerros 5C–2nd. f. The Quadripartite Monster. g. The iconic and anthropomorphic version of GIII. h. GIII as *Ahau Balam*, from a glyphic expression. i. Portrait head of GIII used in glyphic expressions at Caracol, Naranjo, and Palenque. *84*

CHAPTER 3

3.1 The Pomona flare. *94*
3.2 Profiles of pottery vessels from Tomb I, Pomona, Belize. *102*
3.3 Mammiform tripod vessels from Pomona Tomb I. a. Vessel 12 or 17. b. Vessel 16. *102*
3.4 Restored vessels from Pomona Tomb I. a. Vessel 3. b. Vessel 2. c. Vessel 5. d. Vessel 1. e. Vessel 4. f. Vessels 13 and 14. g. Vessel 9. h. Vessel 8. *103*
3.5 Four small, jade, "bib-and-helmet" figurines from Pomona Tomb I. *106*
3.6 "Bib-and-helmet" heads from dedicatory caches of Preclassic pyramids in northern Belize. a. Nohmul Structure 110. b. Cerros Structure 6B. *107*
3.7 Reading order in circular texts. a. Pomona flare. b. Tikal Altar 5. c. Yaxchilan Altar 3. *112*
3.8 Reference system for the Pomona flare. a. Linear order of glyph blocks. b. Breakdown into syntactic units. c. Breakdown into individual signs. *113*
3.9 The Sun God. a. and b. Pomona flare. c. Tikal Stela 31:A17. d. Covarrubias text. e. Slate mirror from Bagaces, Costa Rica. *114*
3.10 The Corn God. a. Pomona flare. b.–d. For the numeral 8. e. and f. For the Corn God. Dresden Codex. *114*
3.11 Celestial sky creature. a. Pomona flare, C,1.h. b. "*Baktun*" sign, Leiden Plaque:A3. c. Month patron on miniature stela. d. Chichen Itza Cenote jade:A5. e. San Diego cliffs, double-headed sky monster. f. Kaminaljuyu Stela 11, headdress mask. *115*
3.12 T51/53 preposition signs. a. Pomona flare, C,1.h. b. Balakbal Stela 5:A8. c. Dumbarton Oaks jade plaque A:p4. *116*
3.13 Pom5 suffix. a. and b. Pomona flare, B, D. c. Name of Corn God from Dresden Codex 20c. d. Name of Corn God from Tikal Temple 4, Lintel 3:F5. e. Head variant of numeral 8 (suppressing jawbone for 10 in original, which yielded numeral 18). f. Name of Death God, Dresden Codex 20c. g. Xcalcumkin Initial Series Lintel, head variant of numeral 10. *118*
3.14 Pom9. a. Pomona flare, C, u.h., b. b. As a verb in day-counts (Glyph D) within lunar months on: 1. El Zapote Stela 5:A6; 2. Tikal Stela 3:A5; 3. Balakbal Stela 5:A5; 4. Palenque Temple of the Sun, doorjamb panel, B2 (bodega #332). c. In sacrifice passage from text illustrated by Covarrubias, Ap.3. d. In sacrifice passage from shell trumpet,

C1. e. In name on jade plaque, probably from Río Azul. f. Kaminaljuyu Stela 10:E3. *124*
3.15 Pom7. a. Pom7.Pom7.T88, on: 1. Pomona flare, C, u.h., a; 2. Costa Rican jade plaque B4. b. T667. Dresden 31c, 35c, 38c, 40c. c. T512/515. d. T712. *126*
3.16 Locations of the sky/rain god, Dresden Codex. a. Structure of passages, 65b–69b. b. Pictures and spellings of places, with locations depicted and spelled similarly. c. Other depicted locations recognizably equatable with their spellings. *127*
3.17 Hand signs related to Pom9. a. Late examples of Pom9: 1. Piedras Negras Altar 1:E'2; 2. Piedras Negras Stela 4:A17; 3. Palenque bodega, #472. b. T220 ritual: 1. Palenque bodega, #142 (panel from Southwest Court), A5; 2. Palenque, Palace Tablet, P17; 3. Yaxchilan Lintel 37:C1. c. T710: 1. typical form; 2. on Early Classic plaque; 3. painted on a Late Preclassic vessel from San Estevan, Belize. d. T218, for ending of time-period, Tikal Stela 3:A8. *130*
3.18 a. Early text. b. Shell trumpet text, sacrifice passage (C5–D6). *132*
3.19 T60 and its substitutes. a. With strap: 1. basic sign form; 2. in T684a, Dos Pilas Stela 8:C18b; 3. in T684b, Piedras Negras Lintel 2:L'1. b. 713/757 accession compound: 1. usual form, from Palenque Tablet of the Slaves, A5; 2. with T1030o in place of T60, from Chinkultic monument now in Tuxtla Gutiérrez Museum; 3. expanded form, Palenque Palace Tablet O1–P2. c. Glyph F, with central element being: 1. T60; 2. T609; 3. T740; 4. T1030o. *135*
3.20 T673[552].60 compounds. a. Pomona flare, A, u.h. b. Yaxchilan Lintel 37:B6. c. Shell trumpet, B5. *139*
3.21 a. Shell trumpet text, A1–B4. b. Tripod vessel text, A1–B2, C1–D2. c. Verb at D3 on panel attributed to Bonampak ("Po Panel"). *141*
3.22 a. Preclassic ear-flare, provenience unknown. b. Head variant for "*tun*," Tikal Stela 6:A4. c. Tikal Stela 31:B16. *145*

CHAPTER 4

4.1 The Deletaille tripod, photograph. *153*
4.2 The Deletaille tripod, roll-out drawing. *154–155*
4.3 The Deletaille tripod, detail. The Musician. *156*
4.4 The Deletaille tripod, detail. The Dismembered Musician. *156*
4.5 Peten region, Late Classic. Plate with full-figure, personified number 9. *157*
4.6 Early Classic cache-vessel lid. *158*
4.7 The Blom plate. *158*
4.8 The Deletaille tripod, detail. IL-Face. *158*
4.9 Beaded halos. a. Peten, Tzakol period. Cache vessel. b. Uaxactun, Tzakol period. Cache vessel. c. Tikal Burial 48 mural. *159*
4.10 The Deletaille tripod, detail. Bearded Lord. *159*
4.11 Inverted *ik* headdresses. a. Tzakol period. Rectangular cache box. b. Peten, Tzakol period. Cache vessel. c. Peten, Tzakol period. Cache vessel. *160*
4.12 El Zapote Stela 5. Early Classic, 9.0.0.0.0. *161*
4.13 The Deletaille tripod, details. Reptile Heads. *162*
4.14 Río Azul. Dragon. *163*
4.15 Izapa Stela 25. *163*
4.16 (*left*) and 4.17 (*right*) The Deletaille tripod, detail. The Two Crocodile Trees. *164*
4.18 The Deletaille tripod, detail. Acrobat, on the left. *165*
4.19 The Deletaille tripod, detail. Acrobat, on the right. *165*
4.20 The Deletaille tripod, detail. Quadripartite Badge. *166*
4.21 The Deletaille tripod, detail. Bird with glyph. *167*
4.22 The Deletaille tripod, detail. Skeletal bird. *167*
4.23 Río Azul tomb panels. *168*
4.24 The Deletaille tripod, details. Isolated, repeated designs. a. Whirl. b. Giant glyph T646s. c. Bud. *169*
4.25 T646. a. Early Classic. Glyph from Pearlman conch. b. and c. Palenque, Late Classic.

Palace, House E. Glyphs. d. Peten, Late Classic. Cylinder vase. *170*
4.26 Kaminaljuyu. Cylindrical tripod. *171*
4.27 Palenque, Late Classic. Bud designs. *172*

Chapter 5

5.1 Dotted scrolls and lines in Maya art. a. Piedras Negras, detail of Stela 12. b. Jaina, Campeche, head of figurine. c. Naranjo Stela 6, detail. d. Sáenz Collection sculpture, detail. e. Yaxchilan Lintel 26. *176*
5.2 Yaxchilan Lintel 24. *177*
5.3 Yaxchilan Stela 1. *178*
5.4 Yaxchilan Stela 4. *179*
5.5 Yaxchilan Stela 7. *179*
5.6 La Pasadita Lintel 2. *180*
5.7 Hieroglyphs of the "water group." *184*
5.8 The "water-" or "blood-group" sign with God C. *184*
5.9 Substitutions involving the "blood group" and God C in Glyph G1. a. Glyph G1 with God C and the "blood-group" prefix. b. Glyph G1 with the "fish-in-hand." *184*
5.10 Yaxchilan Lintel 15. *185*
5.11 Yaxchilan Lintel 25. *186*
5.12 Ucanal Stela 4. *186*
5.13 Jimbal Stela 1. *187*
5.14 Ixlu Stela 1. *187*
5.15 Ixlu Stela 2. *187*
5.16 "Codex-style" vase showing "scattering" event, detail. *188*
5.17 The "Paddlers." a. Portraits on Ixlu Stela 2. b. On an incised bone from Tikal Burial 116. *189*
5.18 Hieroglyphic names of the Paddlers. *Top*: On Jimbal Stela 1. b. *Bottom*: On Sacul Stela 1. *189*
5.19 Other hieroglyphic names of the Paddlers. *190*
5.20 Tonina Monument 110. *191*
5.21 Naranjo Stela 19. *191*
5.22 Dos Pilas Stela 25, secondary text. *192*
5.23 Palenque, West Sanctuary Panel of the Temple of the Cross. *193*
5.24 Palenque, Stucco in House E of the Palace. *194*
5.25 Piedras Negras Stela 6. *196*
5.26 Piedras Negras Stela 11. *196*
5.27 Palenque, Pier C of House D of the Palace. *197*
5.28 Palenque, The Tablet of the Temple of the Cross. *199*
5.29 Palenque, the Sarcophagus lid, Temple of the Inscriptions. *200*
5.30 God C–Sun God representations. a. The central motifs of the Sarcophagus lid, Temple of the Inscriptions, Palenque. b. God C with "blood-group" prefix. c. God C replaced by "God C–Sun God." *202*
5.31 Piedras Negras Stela 14. *202*
5.32 *Top*: Copan, façade of Temple 22. *Bottom*: Detail of Temple 22 façade. *204*
5.33 Quirigua Zoomorph B. *205*
5.34 Yaxha, detail of Stela 6. *205*
5.35 Figure on the front of Quirigua Zoomorph P. *207*
5.36 Seibal Stela 10. *208*
5.37 Seibal Stela 9. *209*
5.38 Yaxchilan Lintel 13. *209*
5.39 Yaxchilan Lintel 14. *210*
5.40 Tikal, Lintel 3 of Temple IV. *211*
5.41 Quirigua Stela H. *Left*: Front, with ruler holding serpent bar. *Right*: Detail of side. *213*
5.42 Copan Stela 2. *214*
5.43 Polychrome plate with Quadripartite God. *214*
5.44 Yaxchilan lintels showing two-headed serpent bars and associated motifs. a. Lintel 38. b. Lintel 39. c. Lintel 40. *216*
5.45 Naranjo Stela 32. *217*
5.46 Polychrome vase with God K in association with blood motifs. *218*
5.47 Tikal Stela 29. a. Front. b. Back. *219*
5.48 The Hauberg Stela. *220*
5.49 La Venta Stela 2, Tabasco. *220*

Chapter 6

6.1 Three Classic Maya burials from Altar de Sacrificios, Guatemala. a. Burial 7, an Early Classic flexed burial of low status. b. Burial 88, a Late Classic interment of middle status.

c. Burial 128, a Late Classic crypt burial of high status. *224*

CHAPTER 7

7.1 First Group, Vase A. *237*
7.2 First Group, Vases B–H. *240–241*
7.3 First Group, Vases A and C, details. *242*
7.4 First Group, Vases A, E, and G, details. *243*
7.5 First Group, Vases A, D, and E, details. *244*
7.6 First Group, Vases A–E and G, details. *245*
7.7 First Group, Vases A, E, and F, details. *246*
7.8 First Group, Vases A, B, D, and E, details. *247*
7.9 First Group, Vases A and C, details. *248*
7.10 Second Group, Vase A. *248*
7.11 Second Group, Vases B–G. *251*
7.12 Second Group, Vases A, C, and E, details. *252*
7.13 Second Group, Vases A and B, details. *253*
7.14 Second Group, Vases A, D, and E, details. *254*
7.15 Second Group, Vase E, details. *255*
7.16 Third Group, Vases A and B. *256*
7.17 Fourth Group, vase. *257*
7.18 Fourth Group, vase. *258*
7.19 Fourth Group, vase. *259*
Chart 7.1 Comparison of details in First Group. *238*
Chart 7.2 Comparison of details in Second Group. *250*

CHAPTER 8

8.1 Late Classic Maya vase. *261*
8.2 Late Classic Maya vase. *264*
8.3 Late Classic Maya vase. *264*
8.4 Late Classic Maya vase, composite. *265*
8.5 Late Classic Maya vase. *265*
8.6 Late Classic Maya vase. *266*
8.7 Late Classic Maya vase. *266*
8.8 Late Classic Maya vase. *268*
8.9 Late Classic Maya vase. *268*
8.10 Late Classic Maya vase, composite. *269*
8.11 Late Classic Maya vase. *269*
8.12 Late Classic Maya vase. *270*
8.13 Late Classic Maya vase. *271*
8.14 Drawing illustrating the positional change of GIII (the infant Jaguar God, the Jaguar God of the Underworld, the Night Sun, Patron of the month *Uo*, and the God of Number Seven) across the Cauac Monster stone altar, as presented in figures 8.1–8.8. *275*
8.15 Late Classic Maya vase. *275*

CHAPTER 9

9.1 Interior views of seven Maya codex-style plates with skyband (or related decorative band) and "kill hole" in the center. *280–281*
9.2 Two Maya codex-style bowls with skyband borders on top and on both the top and bottom edges, respectively. *282*
9.3 Two views of a Maya codex-style bowl with skybands both inside and outside. *282*
9.4 Six Maya codex-style cylindrical vases with upper skyband borders. *283*
9.5 Three Maya codex-style flared cylindrical vases with upper skyband borders. a. Vase containing a prominent *kan* cross. b. Vase showing an *ahau* face. c. and d. Two views of a vessel with *kan* crosses. *284*
9.6 Two Maya codex-style bulging cylindrical vases with upper skyband and *ahau* faces. *284*
9.7 Two views and a detail of a Maya cylindrical polychrome vase with upper skyband border and death-eye fringe. *285*
9.8 Codex-style Maya cylindrical vase with seated Young Lords and upper skyband border. *286*
9.9 Maya cylindrical polychrome vase with supernatural scribes and upper skyband border. *286*
9.10 Maya codex-style cylindrical vase with upper skyband border. *287*
9.11 Maya codex-style cylindrical vase with upper skyband and lower *caban*-band borders. *287*
9.12 Maya codex-style cylindrical vase with an aged God D/N[1] seated on a stepped skyband throne. *289*
9.13 Maya cylindrical polychrome vase with

three gods enthroned, two on a skyband bench. *290*
9.14 Maya cylindrical polychrome vase with an aged deity seated on a bicephalic skyband throne. The entire scene rests on a skyband base. *291*
9.15 Maya cylindrical polychrome vase with skyband dividing upper and lower scenes. *292*

Chapter 10

10.1 The Altar de Sacrificios Vase. *295*
10.2 a. Rim text of the Altar Vase. b. Rim text of the Vase of the Seven Gods. *295*
10.3 Secondary texts on the Altar Vase. a. Text *a*. b. Text *e*. c. Inverted "sky" sign. d. and e. Text *c*. f. Text *d*. g. Detail of Altar vase. h. Detail of cylinder vase. i. Text *b*. *297*
10.4 Palenque, the Tablet of Temple XIV. *300*
10.5 a. Detail of Tablet XIV. b. Details of designs on House D, Piers C and F. c. Detail from canoe scene on bone from Tikal Burial 116. *301*
10.6 a. Main text of Tablet XIV, A1–B4. b. Detail of text on Piedras Negras Lintel 12. c. Glyph from Copan Hieroglyphic Stairway. *303*
10.7 a. Main text of Tablet XIV, A5–A10. b. Secondary text of Tablet XIV. c. Detail of text of Palenque Tablet of the Sun. *304*
10.8 Text of Tablet XIV, B9–D11. *306*
10.9 The Dumbarton Oaks Tablet. *309*
10.10 Main text of Dumbarton Oaks Tablet. *311*
10.11 Text from the rear of Yaxchilan Stela 12. *312*
10.12 *Top*: Tablet XIV, C6–D6. *Bottom*: Dumbarton Oaks Tablet, L. *312*

Chapter 11

11.1 Bonampak, Room 1. *319*
11.2 Bonampak, Room 1. Musicians. *320*
11.3 Bonampak, Room 1. Detail, north and east walls. *321*
11.4 *Huehuetl*. *322*
11.5 a. *Teponaztli*. b. *Tun* glyph. *323*
11.6 Bonampak, Room 2. Trumpets, east wall. *324*
11.7 Bonampak, Room 3. Musicians, west and north walls. *325*
11.8 Column, found at Champoton. *326*
11.9 Chama vase. *327*
11.10 Cylindrical vase, roll-out drawing. *327*
11.11 Cylindrical vase, roll-out drawing. *328*
11.12 Cylindrical vase, roll-out drawing. *328*
11.13 Cylindrical vase. *329*
11.14 Cylindrical vase. *330*

Chapter 12

12.1 Central Mexican representations of the Xipe Tlacacaliliztli sacrifice, Late Postclassic period. a. Detail of Mixtec Tlacaxipehualiztli ceremony. b. Detail from carved and gilded *atlatl*, of possible Mixtec origin, with conch-blower and jaguar impersonator at the base of the scaffold. c. Detail of Mixtec Tlacaxipehualiztli ceremony. *332*
12.2 Xipe costume and paraphernalia. a. Xipe head, from Period III Zapotec urn. b. Sacrificial attendant from the vase in figure 12.3. c. Aztec Xipe impersonator. *333*
12.3 Scaffold Vase. *335*
12.4 Figurine from Jaina, Campeche. *335*
12.5 Possible Classic-period variant of the Yucatec *Tup Kaak* ceremony. a. Detail of painted doorjamb, Tohcok, Campeche. b. Detail of Piedras Negras Stela 11. c. Detail of Piedras Negras Stela 14. *336*
12.6 Pax God trees and Uinal Toad Pax, Late Classic. a. Pax God tree trunk. b. Uinal Toad on Tikal Stela 20. c. Pax God tree trunk. d. Detail of figure 12.8. *336*
12.7 The Postclassic *acante* and related Classic forms. a. Detail of Chinkultic Monument 18. b. *Acante* (Dresden Codex, p. 26). c. Pax God tree as *acante*. *336*
12.8 The Calcehtok Vase. *339*
12.9 The Yalloch, or Río Hondo, Vase. *339*
12.10 Detail of bas-relief column from El Tajin, Veracruz. *341*
12.11 Detail of Classic Maya vase. *342*
12.12 Schematic outline of scaffold structures on Piedras Negras niche stelae. a. Stela 25, 9.8.15.0.0. b. Stela 6, 9.12.15.0.0. c. Stela

11, 9.15.0.0.0. d. Stela 14, 9.16.10.0.0. *342*
12.13 Piedras Negras Stela 11. *343*
12.14 Detail of Piedras Negras Stela 33. *344*
12.15 Iconography found at the base of the Piedras Negras Stela 25 scaffold. *344*
12.16 Iconography of the hunt on Late Classic polychrome vases. a. God A with staff, conch, and bundle. b. Young Lord with conch and bundle. *344*
12.17 Examples of the Serpent-deer in Late Classic and Postclassic Maya art. a. Palenque, House E doorway. b. Skyband Serpent-deer on Late Classic polychrome vase. c. Postclassic form of Serpent-deer. (Dresden Codex, p. 74). *345*
12.18 Detail of Piedras Negras Stela 14. *346*
12.19 Tonina Monument 8, Late Classic. a. Schematic isometric view, showing interior bore. b. Side 2, with prisoner in skyband-and-serpent niche. c. Side 4, with prisoner and skeletonized god with Quadripartite badge. *347*
12.20 Detail of Tikal Stela 31. *348*
12.21 Tikal examples of T193. a. From Early Classic carved vessel. b. From Stela 6, Early Classic. c. From Stela 5, Early Classic. *348*
12.22 Iconographic analysis of Tikal Altar 10, Late Classic. a. Scene on top of Altar 10, with loss of detail from weathering. b. Petaled disk. c. Victim within scaffold motif. d. Live victim. d'. Live victim, Tikal Altar 8. e. Victim standing against a post. f. Slain victim. f'. Detail of Piedras Negras Stela 11. *349*

1

LEE A. PARSONS

Proto-Maya Aspects of Miraflores-Arenal Monumental Stone Sculpture from Kaminaljuyu and the Southern Pacific Coast

The attention that the Terminal Preclassic "Izapan" period, or "horizon," has received in the literature has concentrated on the site of Izapa and the group of Cycle 7 dates on Peripheral Coastal Lowland monuments. Only a few of the important sculptures from Kaminaljuyu have been generally recognized, and usually they have been assumed to be Izapan variants rather than works of distinct corollary art styles. Three contemporary substyles for this period are defined in this paper: the Izapan "narrative" style, clustering at the type site of Izapa, and the Miraflores and Arenal "Proto-Maya" styles, centered at Kaminaljuyu.[1] These three substyles constitute Style Division IV in the large Preclassic analysis (Parsons 1986:94–95), Divisions I and II being Early and Late Olmec, and Division III Post-Olmec (Parsons 1981). The three substyles influenced each other and evolved gradually out of the previous Post-Olmec styles in the area. On the Pacific Coast, sculptures from Abaj Takalik to Chalchuapa participated more in the Miraflores-Arenal tradition than in the Izapan tradition to the west. This was also a Preclassic florescent period in architecture, site development, and social evolution.

Concomitant precocious developments emerge in the Central Maya Lowlands, especially after 100 B.C. Before A.D. 50, southern influence appears in the Lowlands primarily in the guise of architectural reliefs and wall paintings; after that time, the influence manifests itself in the stela-altar cult and associated inscriptions. According to W. R. Coe (1965a), the period from 100 B.C. to A.D. 100 saw the invention of the corbeled vault and the first real florescence of architecture in the Peten. By the Early Classic period, A.D. 200–400, sculpture activity in the southern area had dropped off, while Early Maya sculpture in the Central Lowlands was leading to the unique formulation of Classic Maya art and its Long Count calendrical inscriptions. This apparent transfer of dominance to the Central Maya, and the correlative weakening of the Southern Maya, may perhaps have permitted Teotihuacan Mexican intrusion by A.D. 400.

---

[1] This article is an abstract of a monograph on the entire corpus of monumental sculpture (about 125 total) at Kaminaljuyu (Parsons 1986), where the art styles range from the Middle Preclassic to the Middle Classic. The selection of Terminal Preclassic monuments presented here represents the florescent period of sculptural production, a period conventionally labeled the Izapan horizon. The prior "Post-Olmec" sculptural period was treated separately (Parsons 1981), though that, too, is expanded upon in the monograph mentioned above. Two of the key early Arenal sculptures (Altars 9 and 10) have been discussed elsewhere (Parsons 1983), with emphasis on the evolution of the Maya "serpent-bird deity."

SCULPTURAL ANALYSIS: TERMINAL PRECLASSIC

Stone sculpture of Division IV corresponds to the Terminal Preclassic, a period here bracketed between 200 B.C. and A.D. 200, according to Wetherington's (1978) Kaminaljuyu ceramic chronology, with its sequent Verbena and Arenal subphases. (Eventually, 150 B.C.–A.D. 150 may prove to be tighter dates for this widespread Preclassic florescence in the southern area.) The first half of the span may be referred to as "early Terminal Preclassic," and the second half may be called "Protoclassic." By 100 B.C. some of the sculptural innovations of the south were already being adopted in the Central Maya Lowlands. The Protoclassic overlap of Southern Maya development and Central Maya generation of art and iconography has not been sufficiently elucidated. This paper will demonstrate that the southern influence came more from the Kaminaljuyu sphere than from the type-site Izapan sphere, although both centers must be put into relative perspective. While their sculptural styles are interrelated, there are also significant differences between them.

Because this is a relatively limited period of archaeological time, analysis for separating early Terminal Preclassic sculptures from Protoclassic ones often rests more on stylistic determinations than on controlled excavation data. Many Preclassic Kaminaljuyu monuments have no recorded archaeological provenience, and others were reused during the Middle Classic period in Mounds A and B and at the Palangana "monument plaza" (Parsons 1986). Even at Izapa, there is no internal archaeological evidence for seriating its many stone sculptures beyond the broad time range employed here. Although the whole period is conventionally labeled Izapan; I will focus in this paper on the contemporary, but more neglected, Miraflores and Arenal "Proto-Maya" styles centered at Kaminaljuyu.

The Izapan period favored low relief. The known sites with relief sculpture are more limited in distribution than those with the full-round sculpture of the previous, Post-Olmec era. This would indicate the beginning of centralization and amalgamation of power at selected sites, such as Izapa, Abaj Takalik, Bilbao/El Baul, and Kaminaljuyu. Since little archaeological work has been done on the coast between Escuintla and western El Salvador, one might expect additional Preclassic discoveries among the many sites in this geographical gap (where surface finds of later Cotzumalhuapan sculpture are plentiful).

Types of Terminal Preclassic monumental stone sculptures include full-round toad altars, colossal stone incense burners (fig. 1.2), four-legged altars, and other full-round sculptures. Plain, uncarved stelae, and altars, probably at their peak of production, occur at most flourishing sites.[2] Low-relief carved stelae, wall panels, and altars predominate, however. In this period, the stela-altar complex is established, normally pairing a free-standing stela with a horizontal stone that is round, square, or zoomorphic. This complex spread to the Gulf Coast (e.g., Stela C at Tres Zapotes with its confronting plain altar) and ultimately to the Central Maya Lowlands, where it became a hallmark of Classic Maya commemorative monuments (whatever the actual purpose of the throne-like "altars"). A special class of sculpture in the southern Kaminaljuyu sphere comprises "silhouette reliefs," often perforated, carved only on one side, and mounted on short or tall pedestal bases.

Subject matter and style of Izapan-period sculpture are so diverse that they are difficult to characterize as a whole. In general, complex narrative scenes are accompanied by elaborate iconographic symbolism with a perfection of detailed representation, however esoteric the mythological events depicted. Compositions are often framed, and conventionalized celestial and terrestrial bands "sandwich" a variable, central, active theme. The top-line and base-line motifs tend to be conservatively represented, while the central scenes show stylistic variation and evolution. There is a substantial diversity of profile dragon monsters, probably indicating a proliferation of specialized icons. Also portrayed are celestial "diving gods," serpent-winged creatures (with proto-glyphs infixed in the wings), double-headed serpents, trophy heads, ball-game referents, and confronting and interacting human figures, as well as single, standing elite personages. Costume detail is elaborated, from occasional footgear to ornamented bustles and headdresses to belts with demon heads. Featherwork and a profusion of scroll motifs are also featured. By the time of Christ, examples of bar-and-dot calendrical inscriptions and monuments with columns of Proto-Maya hieroglyphic texts appear.

Before analyzing the substyles, it would be well to characterize the historical picture of this florescent era, 200 B.C.–A.D. 200. The Terminal Preclassic can be viewed as

[2] If these stelae were once painted, there is no preserved evidence of it. On the other hand, in Tomb I at the Lower Plaza of the Palangana at Kaminaljuyu, Cheek (1977:174) excavated a sizable rectangular slab that has one broad side coated with white stucco and the other sides stained red ocher (but with no traces of overpainting). The stelae could have been painted in a freer art style than is represented in the low relief—a style that, if it survived, might demonstrate closer ties to the earliest Maya murals found on the Cauac-phase walls at Tikal (W. R. Coe 1965b). These stelae also may have had painted calligraphy, first preserved in stone in the incised text on Stela 10 at Kaminaljuyu (fig. 1.18).

three continuous clusters of sculptural development. The early phase shows the standardization of the Izapan narrative style and the establishment of new directions at Kaminaljuyu (with Post-Olmec prototypes); the middle phase (ca. 50 B.C.–A.D. 50) sees the first Cycle 7 inscriptions and clear Proto-Maya iconography; and the late phase witnesses a specialized conclusion to the Izapan narrative tradition (although some of its mannerisms were later adopted by the coastal Cotzumalhuapan style), along with more explicitly Protoclassic Maya manifestations in other regions.

The Izapan substyle was concentrated around its type site, although at first it shared important features with the Kaminaljuyu center. The latter's Miraflores and Arenal substyles, however, influenced a larger southern sphere of sites by the first century B.C., extending from Abaj Takalik to Chalchuapa on the coast. The monuments bearing late Cycle 7 and early Cycle 8 dates and inscriptions appear to be more in the Arenal substyle than in the Izapan. Izapa floresced in the early period, with a total of fourteen carved stelae assigned to it in the present seriation. By the time of Christ, the Kaminaljuyu sphere had become dominant; it strongly influenced Abaj Takalik, for example. The parallel Miraflores low-relief substyle, with elegant single standing figures in elaborate costuming and accouterments, became fully developed by the Protoclassic phase and was then more Early Maya in character. This style suggests the emergence of hierarchical, real personages, if not god-impersonators claiming divine descent. The sumptuous elite tombs at the Verbena-phase Mound E–III–3 (Shook and Kidder 1952) support this suggestion. There are few carved stelae at Izapa from the Protoclassic period (perhaps a total of eight), and they are all executed in a complex—by now almost non-Maya—narrative manner.

Izapan stelae have been well analyzed—particularly in papers written by Quirarte (e.g., 1981)—and published in the best manner possible (see Norman 1973, 1976). Elsewhere (Parsons 1986), I have suggested that a group of Post-Olmec low-relief stelae at Izapa (3, 6, 11, 19, 20, and 28) may be prototypes for the narrative-style sculpture that peaked in production in the early Terminal Preclassic. I have further suggested that Izapa stelae 2, 4, 7, 8, 9, 10, 14, 18, 21, 23, 24, 45, 50, and 60, as well as Izapa Altar 20 and the four-legged "Thrones" 1 and 2 epitomize that phase. These monuments include a wide range of subject matter: Stela 21 shows a standing figure decapitating a fallen victim, with a manned litter in the "background"; Stela 50 shows a skeletal figure in the lower right and an ascending cord with a "climbing" figure in the upper left; other stelae show winged diving gods, and so forth. I place in the late Terminal Preclassic Izapa Stelae 1, 5, 12, 22, 25, 26, 27, and 67, with their far more complex compositions. Some include extra figures above the celestial band, for example, Stela 1, showing the fisherman with his baskets; Stela 27, the only one with numerical bars over an eroded glyph (though Stela 1 has four dots in its supra-celestial scene); and the extraordinary Stela 5, with its intricate "tree-of-life" composition. The latter demonstrates an extreme *horror vacui*; it is surely the latest in the series of Izapa carvings, if glyphs with cartouches. Later monuments depict looped platform sandals, trefoil shells pendant from belt heads, and hieroglyphic texts. Subject matter includes profile dragons, serpent-birds, "peering" celestial figures, human figures, and framed basal panels. Common motifs include feathers, scrolls (often double), volute earplugs, bell-shaped ear pendants, nose beads and other beaded ornaments, and knotted bows.

There are other characteristics that *separate* the Arenal and Miraflores substyles, however. More closely affiliated with the Izapan narrative style than is the Miraflores style in general, the early phase of Arenal shows complex scenes with mythological creatures, filled in with scrolls and supplementary figures (fig. 1.3). Scenes from the middle and late phases feature double facing figures (figs. 1.8, 1.11), along with sky deities, glyph columns, and late Cycle 7 and early Cycle 8 bar-and-dot inscriptions. (The concentration of the latter on the coast helps to explain the closer ties to Izapa, though Izapa itself lacks such inscriptions.) Also, we begin to see platform looped sandals (fig. 1.9), a feature shared with Miraflores, and stubby, shell belt pendants. Special classes of sculpture include four-legged (fig. 1.8) and drum-shaped altars. In general, Arenal human figures are stocky (occasionally with body outlining), and their faces show puffy features and bulbous noses. Arenal scrolls and earplugs tend to be evenly rounded and to have inner incised outlines. One of the most significant stylistic criteria of Arenal raised relief, especially at the type site, is convex carving with softened edges, a departure from most Izapan reliefs. (For examples of early Arenal low relief, see figs. 1.3, 1.5, 1.6; for later Arenal, beginning ca. 50 B.C., see figs. 1.7–1.11.)

Contemporary Miraflores low-relief sculpture is more Proto-Maya in overall stylistic execution, although Arenal reliefs seem more apt to bear glyphic inscriptions. Miraflores art shows an elegance and refinement of line and technique, with very precise and crisp relief. The flatter relief is often carved in several planes. Volutes and earplugs tend to be rounded rectangles, and two-part scrolls are usually elongated. Single standing figures of linear, realistic proportions (and facial features) are emphasized, with more empty space around the main figures than is found around Arenal figures. Thighs and buttocks generally have a simple, continuous outline. Two profile feet, each showing the big toe, are aberrations in draftsmanship; one foot is consistently placed behind the other. Costume and ornamentation are elaborated with profuse, finely incised detail. While Miraflores figures are often skirtless, belts, bustles, and headdresses are resplendent. Glyphlike symbols occur: Kaminaljuyu Stela 10 (fig. 1.18) has a long, finely incised hieroglyphic text. In addition, there are many graceful silhouette reliefs (a trait shared with Arenal later in the phase).

Early Miraflores sculpture commences with flat, almost blocky relief and culminates in Stela 11 (fig. 1.14), with its sky deity and basal band and, incidentally, its iconographic relationships with the early Izapan style. Middle Terminal Preclassic Miraflores is typified by Stela 10 (fig. 1.18), which has an intensive Proto-Maya elaboration. Late Miraflores art is characterized by Kaminaljuyu Stela 2 (fig. 1.22), in we take into account the simpler, more open-spaced low-relief beginnings of the coastal sculptural traditions in the Post-Olmec period.

The Terminal Preclassic sculpture period at Kaminaljuyu used to be loosely considered to have an earlier Miraflores and a later Arenal component, implying a sequent development of style following the successive Verbena (formerly Miraflores) and Arenal ceramic phases at the site. Ostensibly, there are two different, but interrelated, sculpture styles at Kaminaljuyu, though it is now reasonable to suppose that they developed in collateral fashion, and that both shared influences from the Izapa style. The only way to make some sense of the perplexing diversity of monuments is to assume that both the Miraflores and the Arenal substyles had an earlier 200–1 B.C. facet and a later A.D. 1–200 facet, to make only a two-part division. This assumption also follows Wetherington's (1978) ceramic analysis, which shows that Verbena and Arenal were intergrading subphases of the Terminal Preclassic. It is impossible to accept that one substyle entirely preceded or followed the other.[3]

This essay will attempt to separate the stylistic directions of Miraflores and Arenal, though some sculptures are difficult to place with confidence. The chronological bracketing of the whole phenomenon seems secure, and it is possible to demonstrate which are the earliest and which are the latest sculptures, but the overlap in the substyles often precludes precise identification. For convenience, in the present state of knowledge, it might be best to talk about a hyphenated Miraflores-Arenal tradition, as opposed to the Izapan tradition, and then to look at the probable development through specific examples. If one were to choose a few "type" examples of Izapan sculpture, a few "type" examples of Miraflores sculptures, and a group of typical Arenal sculptures, the stylistic schools could be easily demonstrated. Once the offshoots of the Kaminaljuyu sculptural tradition became isolated and established in the Central Maya Lowlands, there was a more linear development of styles from Early to Late Classic (Proskouriakoff 1950).

Generalizing combined Miraflores-Arenal characteristics, we find wall panels, stelae, altars, and silhouette reliefs, as well as some full-round sculptures (which, where documented, tend to be earlier). Aside from a profusion of symbolic referents, there is finely incised detailing of scrolls and other motifs (with curves on bent limbs), and frequent framing of whole compositions. (Fine-line incising is a regular feature also of the contemporary pottery.) The earlier monuments, which often show bare feet, may have curved borders as well as inset panels with rounded corners; there are also proto-which the profile figure stands, with tiered and beaded featherwork, plumed backracks and bustles, looped sandals, and triple-shell belt pendants elongated in Early Maya proportions (fig. 1.23). This substyle is concentrated at highland Kaminaljuyu itself, with a few notable outlying examples at Abaj Takalik (fig. 1.15), Chocola (fig. 1.19), and Bilbao (fig. 1.23) on the Pacific slopes. (For examples of early Miraflores low relief, see figs. 1.12–1.17; for later Miraflores, beginning ca. 50 B.C., see figs. 1.18–1.23.)

---

[3] If the separation of these substyles is correct, there is still no clue as to the classes of people or cultural forces behind them. The Arenal style might represent an older, more conservative coastal tradition in which the glyphic systems originated, while the Miraflores style might reflect closer highland alliances with the developing Lowland Maya culture. In any creative period of developing arts in the history of world civilizations, there are likely to be various styles emerging simultaneously. This process should be a fruitful area for further art-historical investigation.

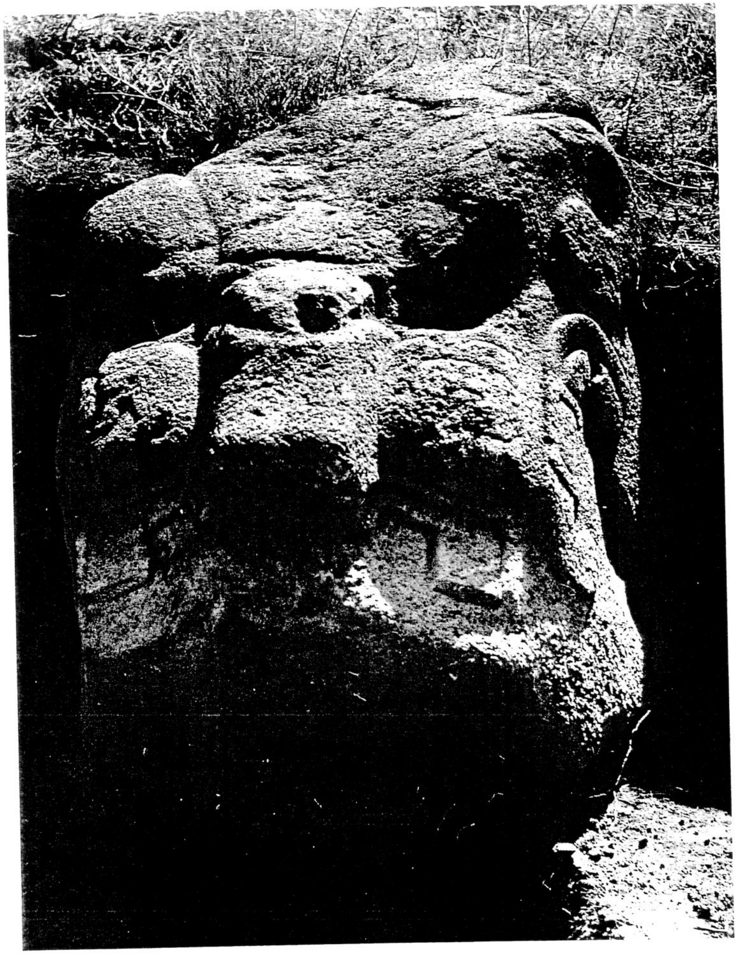
Some Miraflores–Arenal Monuments

Monte Alto Monument 3, Escuintla (fig. 1.1)

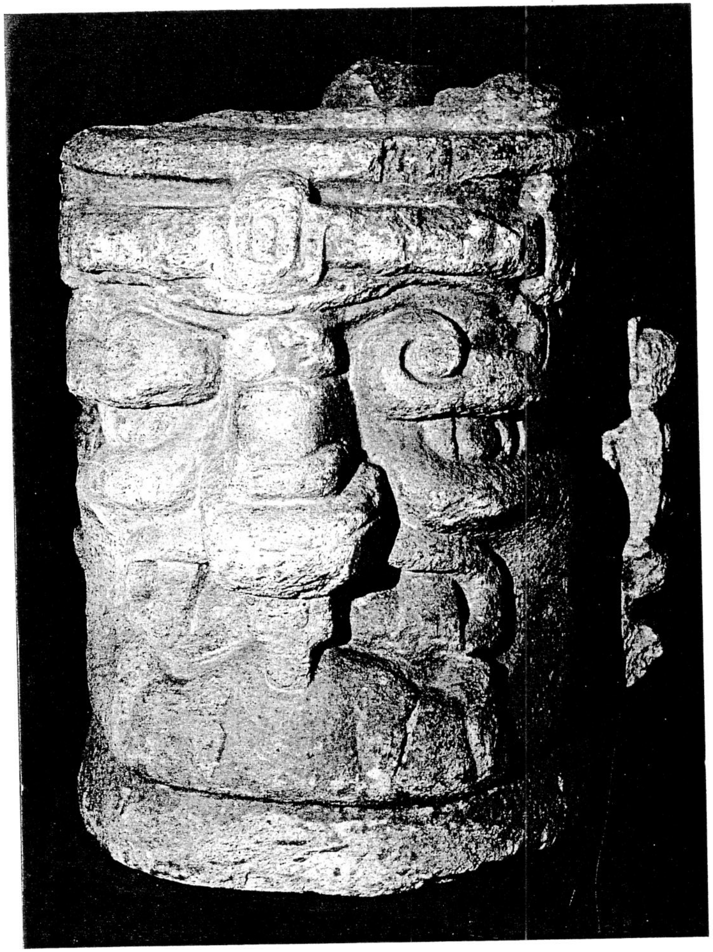
The first sculpture pertinent to the present topic probably dates to the third century B.C., just prior to the Terminal Preclassic. Monument 3 was found on the eastern boundary of the Monte Alto mound group in a line of boulder sculptures. It is an aberrant sculpture at the site, in that it is in the Olmecoid tradition rather than in the fat-faced Monte Alto style. A feline-monster-masked head on a boulder (the back is unshaped), it resembles other Post-Olmec anthropomorphic heads and profile demons in iconographic detail. It also foreshadows Terminal Preclassic monster-masked heads (fig. 1.2), as well as the later, widespread Maya Lowland architectural masks. Relatively high relief is used for the typical "fanged" jaguar mouth; the central, blocky, projecting upper lip with nostrils above; the rounded-rectangle eye; the volutes leading off both sides of the forehead, the double-scrolled earplugs, and the double scrolls on both cheeks.

Kaminaljuyu Monument 17 (fig. 1.2)

The set of three colossal, stone, three-pronged incense-burners with grotesque heads, Monuments 16, 17, and 18, was found together in the large Mound D–III–6 to the southwest of Verbena Mound E–III–3. Ceramically, the mound was Verbena-Arenal, but the sculptures surely belong to the earlier subphase, probably to the second century B.C. (Borhegyi 1951 assigned identical excavated three-pronged ceramic censers to the Miraflores [Verbena] phase.) Monument 17 is the best preserved of the three. The form is cylindrical, with grotesque head, side (ear) flanges, and the stubs of three prongs on the flat top. Feline-masked images have as their prototypes Monument 3 at Monte Alto (fig. 1.1) and other Olmecoid representations. In the Miraflores versions, we see the characteristic projecting gum ridge below the nose, a feline mouth with split fangs at the corners, and a *tau*-shaped front tooth. The headband has a central U-framed symbol and related side emblems. (A similar headband may be seen on the Cauac-phase [100 B.C.–A.D.50] greenstone mask at Tikal [W. R. Coe 1965b:21].) The iconography, complete with *tau*-shaped front teeth, is mirrored in the Chicanel-phase stucco architectural masks on the middle tier of E–VII sub at Uaxactun (Ricketson and Ricketson 1937:figs. 39–50). While various long-lipped images are later as-



1.1 Monte Alto Monument 3, Escuintla. Height, 153cm; width, 85cm; depth, 150cm. (Photograph by the author, courtesy of the Milwaukee Public Museum.)

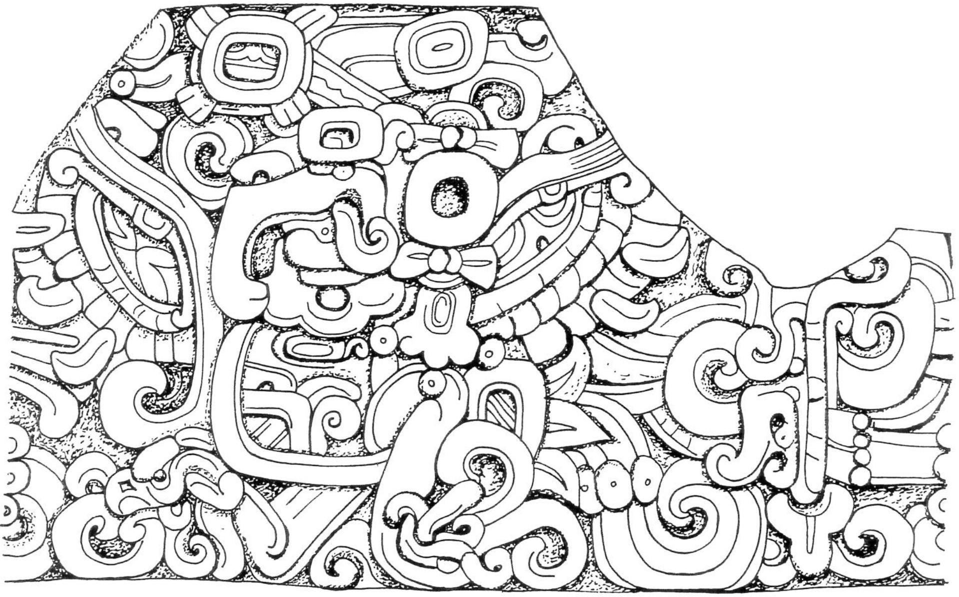


1.2 Kaminaljuyu Monument 17. Height, 102cm; diameter, 80cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 2045. Photograph by Harold G. Russell.)

sociated with earth, serpent, and rain deities, the filed front teeth on these sculptures may denote a specific prototype for the Maya Sun God—or, more likely, may refer to a combination of all these deities. There are also similarities to the early Monte Albán II "Zegache" vase from Oaxaca (Easby and Scott 1970:no. 77).

KAMINALJUYU ALTAR 10 (fig. 1.3)

The pair of drum-shaped Altars 9 and 10 are the most remarkable and complex of early Arenal-style low-relief configurations. These prototypes of the Classic Maya serpent-winged deity (Parsons 1983) were discovered in level terrain near the center of the site in a cache or "dump" with four other full-round portable sculptures. Of the associated pottery, the Arenal sherds were the latest (Suzanne Miles, personal communication, 1963). However, I assign them stylistically to early-to-middle Verbena times. These matched cylindrical altars, on low cylindrical tetrapods, were carved from a light-green volcanic stone; when discovered, they bore traces of red pigment. The sides are intricately carved in low relief around the circumference. The Arenal-style reliefs are framed by plain bands at the top and bottom. The two compositions are essentially mirror images. Dominating the theme of Altar 10 is an elaborate serpent-bird monster facing left; his counterpart on Altar 9 faces right. Both have a pair of outstretched, frontal wings. Their profile dragon heads have sharply downturned upper lips and prominent earplugs, below which are outlined bellies and pairs of serpent-



1.3 Kaminaljuyu Altar 10. Total height, 65cm; diameter, 27cm; circumference, 83cm. Height of cylindrical feet, 6cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 6368b. Roll-out drawing rendered by the author from eight composite photographs, courtesy of Joya Hairs, Guatemala; final rendering by Ryntha Johnson.)

headed limbs. A glyphlike sign, with dependent profile dragon head, fills a columnar space between the front and back of the principal monster. (This element is extant on Altar 9 but absent on Altar 10, because the corner of the stone is sheared off.)

Of special interest is the treatment of the monsters' wings; the forward wing can be viewed most clearly. Tiers of feathers are contained and held by a profile serpent-mouth bracket, which substitutes for the wing bones. The back corner of this abstract mouth turns in a scroll; above the front of the serpent mouth is the typical humanoid nose. An alveolar element containing one molar lines the mouth and ends in a tight volute. Below, in the center of the wing, a half-cartouche glyphic element is featured. The rear serpent wing also contains a "glyph" of another type. (Similar serpent wings are depicted on stelae from Izapa.)

Both altars incorporate six rounded-square cartouches with infixes that may be considered Proto-Maya day-sign glyphs. They occur in the same relative positions on the two altars, with slight variations in draftsmanship. The forward wings contain the basic sign for 'day,' *kin*; the rear wings contain half of the *kan*-cross symbol, which might possibly be a prototype here for the Classic Maya day glyph, *Akbal*, which also means 'night.' The frontal headdress glyph of the serpent-winged deities is graphically similar to the *kan* symbol. A related glyph appears on the headdress frontal of Miraflores Stela 11 (fig. 1.14); there is also an *akbal* glyph in the headdress of a figure painted on a Tikal structure dated to the time of Christ (W. R. Coe 1965b:10). A sign at the back of the Kaminaljuyu headdress may be interpreted as *Muluc*. The trefoil symbols in the tail bustles are prevalent on Terminal Preclassic monuments, but they cannot be traced as ancestral to any particular Maya glyph, for they are too generalized. On Altar 9, there is an isolated cartouche element "behind" the principal creature; the infix is a profile of an unidentified animal, but, since the same animal appears in the monster's belly, one might wonder if this symbolizes the serpent-winged deity himself.

The bell-shaped earplug pendant with three beads, in the center of Altar 10, occurs identically on four other Kaminaljuyu low-relief monuments (Stelae 1, 22 [fig. 1.7], 25 [fig. 1.6], and Silhouette Relief 4 [fig. 1.9], all of the Arenal tradition). It is also worn by the seated figure incised on a Protoclassic stone pectoral at Dumbarton Oaks (M. D. Coe 1966:fig. 7).

EL MIRADOR STELA 2, EL PETEN (fig. 1.4). See text, p. 39, for discussion.

KAMINALJUYU MONUMENT 63 (fig. 1.5)

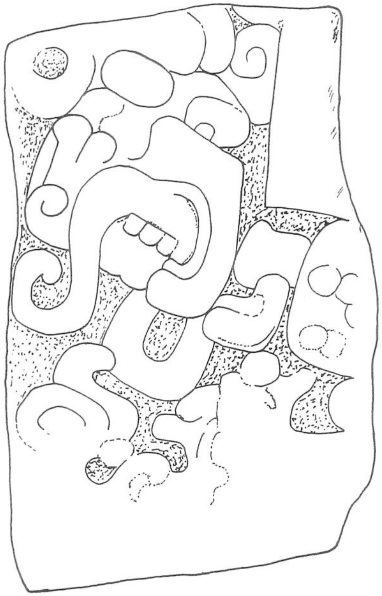
Monument 63 was excavated by the Pennsylvania State University Kaminaljuyu Project in the center of the Lower Plaza at the Palangana. It had been deposited inside the Esperanza-phase Tomb 1, beneath the floor of an enclosed shrine, where it was associated with fragments of two plain stelae and six plain columnar basalts (Cheek

1977:pl. 5b and fig. 63). The Middle Classic deposition of monuments in the Palangana zone greatly postdate the style period of the sculptures. Except for the two carved panels on Monument 63, the horizontal stone is smoothly pecked. The upper third curves evenly from front to back (the panels are, therefore, convex). The right-hand panel depicts two confronting monster-masked seated figures, one grasping the wrist of the other (cf. Izapa Stela 18, in Norman 1973:pl. 28). Only a portion of the left panel was carved on this stone, but there are indications that its scene was thematically a mirror image of the right panel. (There must have been another, similar stone butting up to this one to complete the left panel.) The shape of the sculpture suggests that it originally functioned at some other location as an architectural panel, banquette, or cornice.

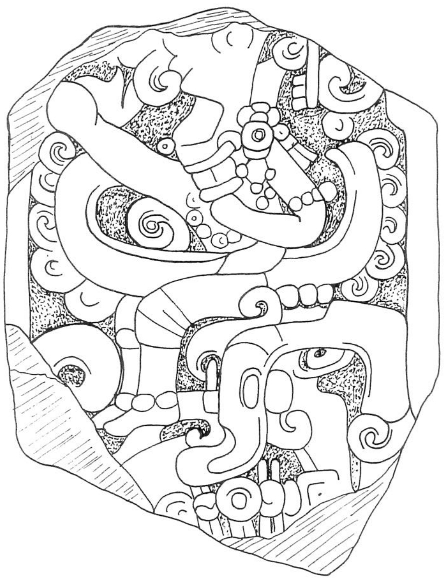
The right-hand character in the complete panel has a skeletal animal head and a thick belt. His opponent has a demon head with a cartouche in front of his face. Both figures have earplugs with volutes, bracket-shaped collars, beaded-bar breast pendants, and beaded wristlets. The left figure has a winglike back symbol containing a cartouche *kin* sign, sunlike rays, and a crenelated border. The seated figure in the extant portion of the left panel also has a large back symbol with different infix. (These two cartouche symbols parallel precisely the right and left wing glyphs depicted on Altars 9 and 10.) These anthropomorphic figures may have some direct relationship to early serpent-bird deities. (A comparable back emblem, with attached wing feathers, is found on the contemporary Stela 4 at Izapa [Norman 1973:pl. 8].) Could these be ballplayer adversaries with concomitant opposing Sun-Moon, monkey-rabbit, and life-death symbolism?

KAMINALJUYU STELA 25 (fig. 1.6)

Stela 25 was also excavated by the Kaminaljuyu Project in the Lower Plaza, where it was found lying face up on the surface of the "shrine-atrium" compound in a terminal Middle Classic or early Late Classic context (Cheek 1977:pl. 5c, fig. 30). It had obviously been moved there from some earlier association at Kaminaljuyu, when the "monument plaza" was set up in the Palangana. Although damaged, the sides retain portions of their original framing borders. The low-relief iconography of Stela 25 is as important as that of Monument 63. In the lower right, an upward-directed earth monster gapes; seated, or emerging, above it is a human figure with a broad, crescent-shaped form attached to it at waist level. He wears a helmet with chin strap, his arms are in a "boxing" pose, and there are wide wrappings on his left knee. His earplug has a bell-shaped pendant; his nose bead is like that on Stela 11 (fig. 1.14) and many other Terminal Preclassic figures. The upper right corner shows part of a downward-directed profile dragon with a three-toothed scrolled snout (cf. the flanking dragons on Altars 9 and 10 [fig. 1.3]). There are many decorative outlined scrolls, especially on the central crescent motif.

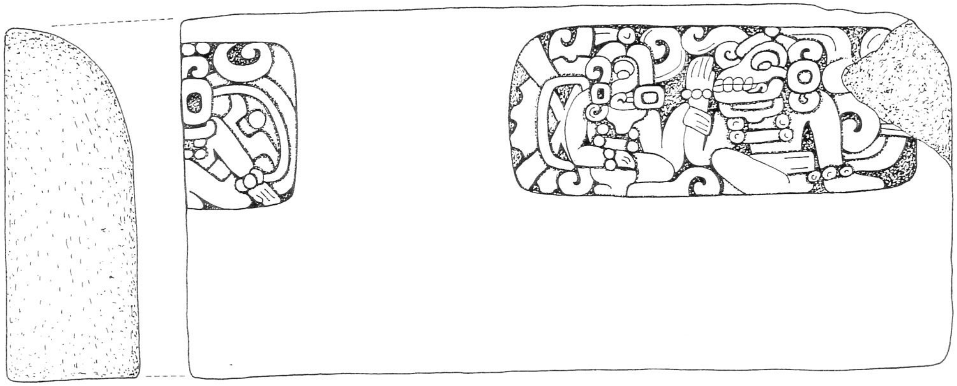


1.4 El Mirador Stela 2, El Peten, Guatemala. Back side. Present height, 98cm; width, 74cm; depth, 25cm. (Peabody Museum, Harvard University. Redrawn by Ryntha Johnson, with permission, from original by Ian Graham.)



1.6 Kaminaljuyu Stela 25. Fragment. Height, 110cm; width, 80cm; depth, 12cm. (Museo Nacional de Arqueología y Etnología, Guatemala. Drawing by the author from photographs by Richard M. Rose; final rendering by Ryntha Johnson.)

BIBLIOTECA DE GEOGRAFIA E HISTORIA
UNIVERSIDAD COMPLUTENSE
MADRID



1.5 Kaminaljuyu Monument 63. Length, 172cm; height, 60cm; depth, 29cm. (Museo Nacional de Arqueología y Etnología, Guatemala. Drawing by the author from a series of close-up photographs by Richard M. Rose; final rendering by Ryntha Johnson.)

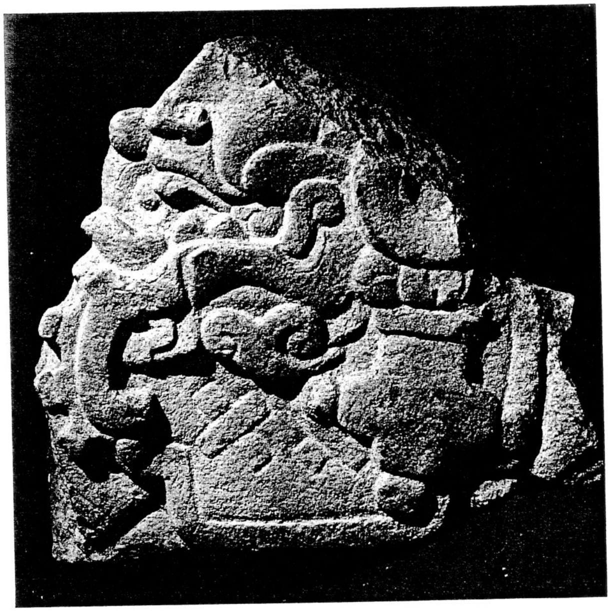
Given the helmet, knee padding, and dynamic posture, we may assume that this is a ballplayer. These features are found on the carved ballplayer panels at Dainzu, Oaxaca (Bernal 1968), dated to the contemporary early Monte Albán II phase (Scott 1978). On Stela 25, the yokelike belt is expanded into a compressed U symbol, a clear precursor of the Maya Moon glyph. The theme may be interpreted as the "birth of the Moon from the Underworld" (in itself a symbolic ballgame reference from the Classic period through the sixteenth-century *Popol Vuh*, which deals, in part, with the diurnal cycle of Moon and Sun, and with ballplayers being similarly transformed). Here, a dragonlike earth monster ejects a ballplayer who is wearing the Moon symbol in the yoke position, and who is ascending toward the dependent sky dragon. The ascending earth serpent with a human head in its jaws on the Protoclassic Stela 4 at Abaj Takalik can be similarly interpreted (Parsons 1973:206). Two somewhat earlier stelae at Izapa apparently represent the same mythological symbolism: Stela 3 (Norman 1973:pl. 6) features a warrior and an upended earth dragon above whose jaws floats a canoe-shaped element containing a human head; Stela 6 (ibid.:pl. 12) has the same crescent form above the open jaws of a toadlike earth monster. These are surely early Moon glyphs. Furthermore, their associated human heads all have forehead curls or scrolls comparable to those on the later Maya Moon Goddess, God I.

KAMINALJUYU STELA 22 (fig. 1.7)

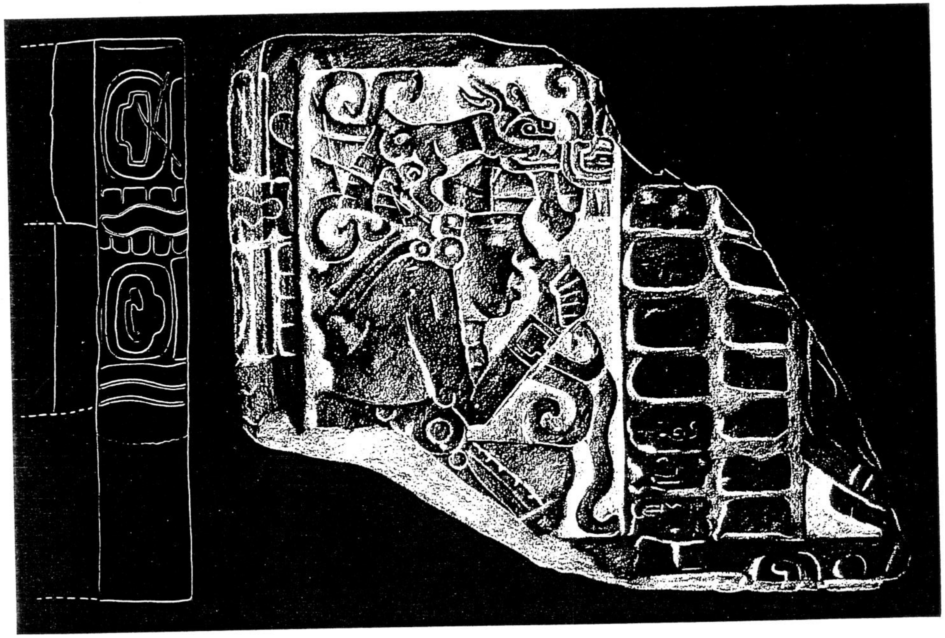
"Stela" 22 might well be a fragment of a silhouette-relief sculpture. Furthermore, it has stylistic features that crosscut the Miraflores-Arenal substyles. At the top appears the greater part of a rather realistic profile human face with nose bead and scroll issuing from the open mouth. (The portraiture resembles that of the helmeted Miraflores-phase Stela 11 [fig. 1.14], and the left figure on Stela 10 from Kaminaljuyu [fig. 1.18].) The rounded earplug has a bow knot and a beaded bell-shaped attachment. His chin is contained by upside-down serpent jaws, as though the head were emerging from them. This chin dragon has a double-volute eye plaque and a long upturned snout framed by beads and crenelations. An identical serpent snout is modeled on the architectural façade of a Terminal Preclassic mound at Cerros, Belize (Freidel 1979:fig. 8). An outlined biblike quatrefoil, containing two diagonal cross motifs, is seen underneath and, apparently, over the shoulders of the figure. Such quatrefoils are also represented on Izapan stelae.

KAMINALJUYU ALTAR 1 (fig. 1.8)

Vestiges of a projection on the underside of the intact corner of this broken stone indicate that it was a four-legged rectangular altar. There were early Terminal Preclassic four-legged altars or thrones at Izapa, and also a fragment of a small, plain one at Chalchuapa, El Salvador (Monument 6, in Sharer 1978, vol. 1). The glyph columns and other features of Altar 1 show that we are now entering the one-century period



1.7 Kaminaljuyu Stela 22. Fragment. Height, 30cm; width, 35.5cm; depth, 10cm. (Museo Nacional de Arqueología y Etnología, Guatemala. Photograph courtesy of Joya Hairs, Guatemala.)



1.8 Kaminaljuyu Altar 1. Fragment. Length, 110cm; width, 91cm; depth, 22cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 2072. Copy photograph from drawing by Antonio Tejeda F., reproduced in a 1973 calendar designed by Joya Hairs, Guatemala.)

bracketing A.D. 1, which produced a host of comparable sculptures with bar-and-dot inscriptions; these continue into the late Arenal phase.

This monument was encountered on the surface of Mound C–II–14 at the Palangana acropolis (Lothrop 1926b: fig. 47b). It portrayed a pair of human figures seated in panels, facing a central double column of hieroglyphs, now too abraded to be deciphered. On the beveled left edge, two ovoid cartouches containing *tau* symbols remain, separated by a leaflike motif. Bar-and-dot numerals 6 and 9 overlap the top frame above these "glyphs." The puffy Arenal-style face has a bead between the nose and the raised hand. The bracelet and bifurcated scrolls resemble those of Izapan and other sculptures of the period. Although the two styles are profoundly different, this altar is probably contemporary with Miraflores Stela 10 (fig. 1.18). This altar also presages the format of the later Arenal Altar 2 (fig. 1.11).

KAMINALJUYU SILHOUETTE RELIEF 4 (fig. 1.9)

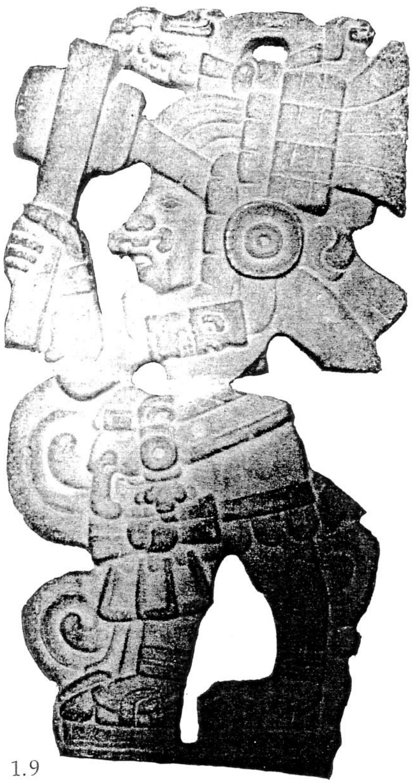
Silhouette 4 (originally published by Kidder, Jennings, and Shook 1946: fig. 141b) is an important free-standing sculpture, with some Miraflores affinities. The stocky profile figure holds a hafted axe. The lower part of the body is fringed by tight, outlined scrolls, and the feathered headdress is surmounted by a serpentine dragon. The figure wears the looped platform sandals characteristic of the Protoclassic period, a fringed kilt (like that on the figure on Altar 1), and a belt fronted by a demon with downturned snout and a beaded bell-shaped ear ornament. Depending from his head are a bow knot and three stubby shell danglers. The warrior's face resembles that of the contemporary El Baúl Stela 1.

KAMINALJUYU STELA 21 (fig. 1.10)

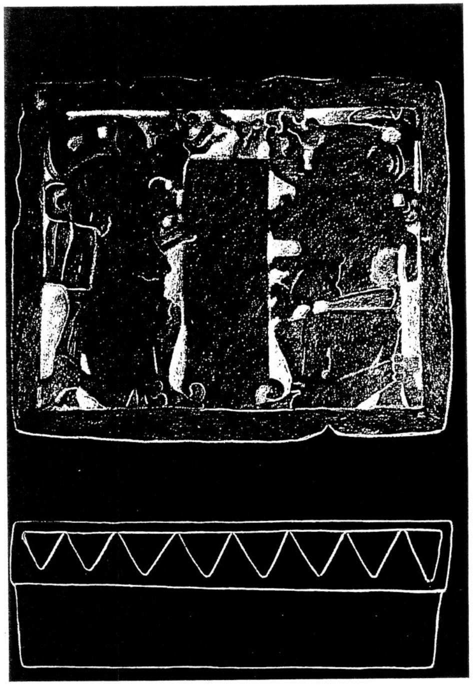
The fragment of the important Stela 21 constitutes the lower mid-section, including its left frame. At the right, a personage stood facing left toward a double glyph column. Below, to his left, an obeisant figure with a puffy Arenal face crouched and gestured toward the principal figure. Visible features of the latter include a serrated kilt and a grotesque scrolled belt head with pendant bow knot and three stubby danglers with incised shell motifs. A fragment of this figure's lower arm and elbow remains above the belt head. The subservient figure wears a jaguar or deer headdress with lolling tongue. Above, the base of a raised rectangular glyph column shows a pair of incised hieroglyphs of ostensible Proto-Maya style.

KAMINALJUYU ALTAR 2 (fig. 1.11)

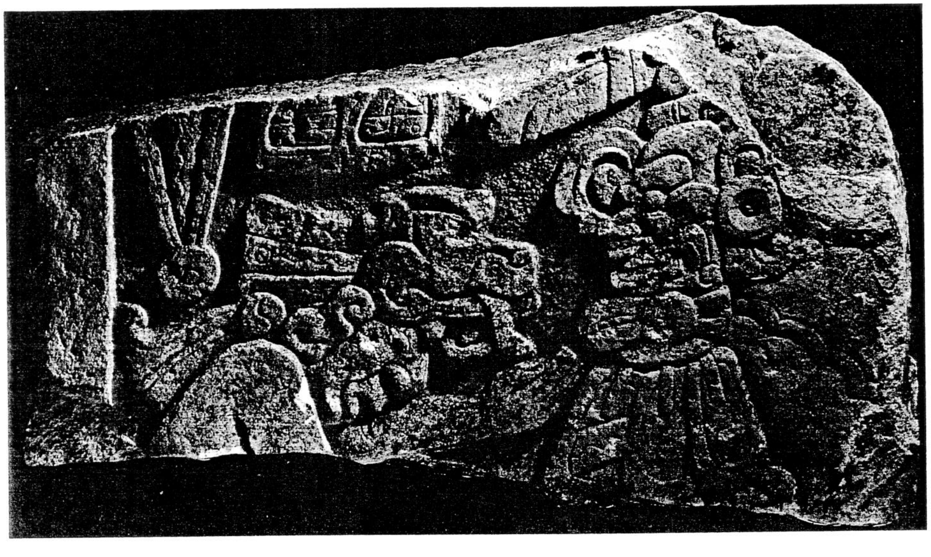
The eroded Altar 2 was excavated by Kidder, Jennings, and Shook (1946: fig. 133d, e) in Tomb B-I (Mound "B," or F–VI–2), into which it had fallen from the platform above. It was obviously placed on view there in Middle Classic times, though the style of the sculpture is late Arenal. This framed rectangular stone features two kneeling



1.9



1.11



1.10

1.9 Kaminaljuyu Silhouette Relief 4. Peg-base support is not visible in photograph. Height, 110cm. (Alvaro Sánchez Collection, Guatemala. Photograph by the author.)

1.10 Kaminaljuyu Stela 21. Mid-section fragment. Length, 70cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 8135. Photograph courtesy of Joya Hairs, Guatemala.)

1.11 Kaminaljuyu Altar 2. Length, 88cm; width, 75cm; depth, 28cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 2043. Copy photograph from drawing by Antonio Tejeda F., reproduced in a 1973 calendar designed by Joya Hairs, Guatemala.)

figures facing a central vertical panel. The sides of the altar are carved with continuous triangular geometric motifs, like the base line on Izapa Stela 26 (Norman 1973:pl. 44). The figures have elaborate headdresses. It is more than probable that the central column had once been carved with hieroglyphs, although no traces remain. As Proskouriakoff observed (1950:110 and fig. 36d), this composition resembles Altar 1 at Polol in the Peten, which, she suggested, could be as early as Cycle 8. It relates to the dated Stela 5 at Abaj Takalik (A.D. 126; J. A. Graham 1977:197), thus fitting comfortably in this Protoclassic era.

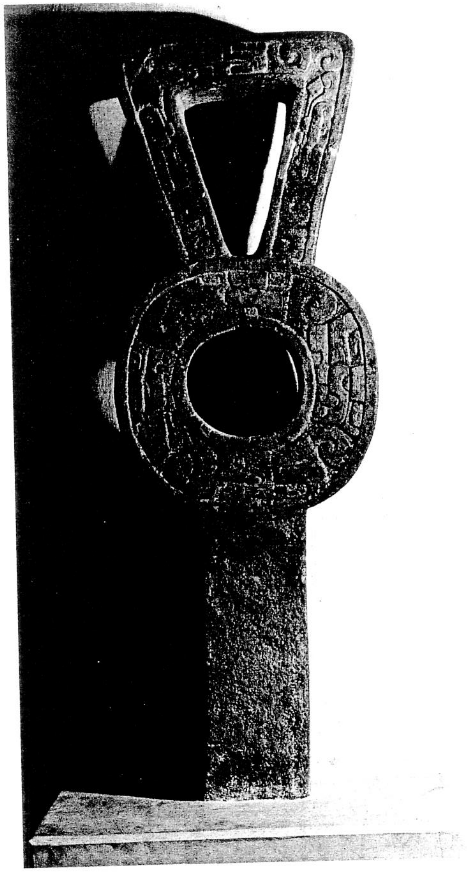
KAMINALJUYU SILHOUETTE RELIEF 2 (fig. 1.12)

The early Miraflores style is introduced with two of its silhouette relief sculptures. The large and extraordinary Silhouette 2 was excavated in 1960 by Gustavo Espinosa in the lower levels of the C–II–4 Acropolis—reportedly associated with a burial—side by side with two plain columnar basalt shafts and with Arenal sherds as the latest pottery. Unfortunately, there is no more precise contextual data on this important find. It is a vertical-shaft monument with a central ring topped by a perforated triangle. Circumscribing the outlined ring are four profile dragon heads with scrolls at their snouts. These blocky, straight-snouted forms, with exposed teeth and gums, suggest an early Miraflores style.

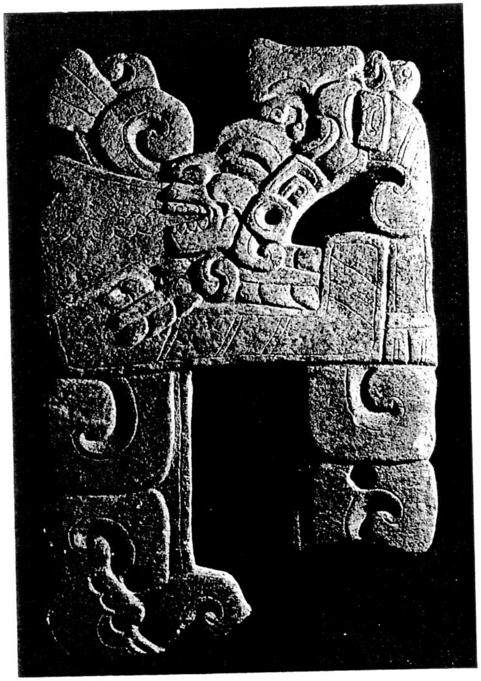
It is generally accepted (see Miles 1965:262) that this stone functioned as a semiportable ballgame marker prior to the Middle Classic period when formal masonry courts and horizontally tenoned markers were introduced and became commonplace. It would also be comparable in function to the famous composite vertical stone marker from La Ventilla at Teotihuacan, a city lacking architectural ball courts (see Easby and Scott 1970:147). A small vertical marker with central disk was reported also from Chalcatzingo, Morelos (Cook de Leonard 1967:pl. 8), and others were reported from two sites in Guerrero (Cervantes 1976:foto 3). The latter have carved ovoid balls atop rounded shafts. With some hesitation, I hypothesize that the enigmatic alignment of three megalithic drums capped by large stone balls in the plaza in front of Mound 30 at Izapa (Norman 1976:262–265) could have been scoring markers for a ballgame played there.

KAMINALJUYU SILHOUETTE RELIEF 3 (fig. 1.13)

The elegant and complex Silhouette 3 is complete at the top, incomplete at the bottom. Details are executed with fine outlining. In the upper register is a skull-like human head, with scroll ear-plug, from whose mouth fans a breathlike motif. A knotted ornament beneath, with two leaf-shaped tassels, resembles a motif on the side of Altar 1 (fig. 1.8). A compact, down-snouted, scroll-eyed demon serves as a headdress. Its squared eye plaque has a U motif identical to that on the Silhouette Relief 2 dragons (fig. 1.12). Squared Miraflores-style scrolls with flat surfaces frame a rectangular per-



1.12



1.13

1.12 Kaminaljuyu Silhouette Relief 2. Height, 170cm; ring diameter, 58cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 8136. Photograph courtesy of Joya Hairs, Guatemala.)

1.13 Kaminaljuyu Silhouette Relief 3. Height, 62cm; width, 39cm; depth, 6cm. (Private collection, Guatemala. Photograph courtesy of Joya Hairs, Guatemala.)

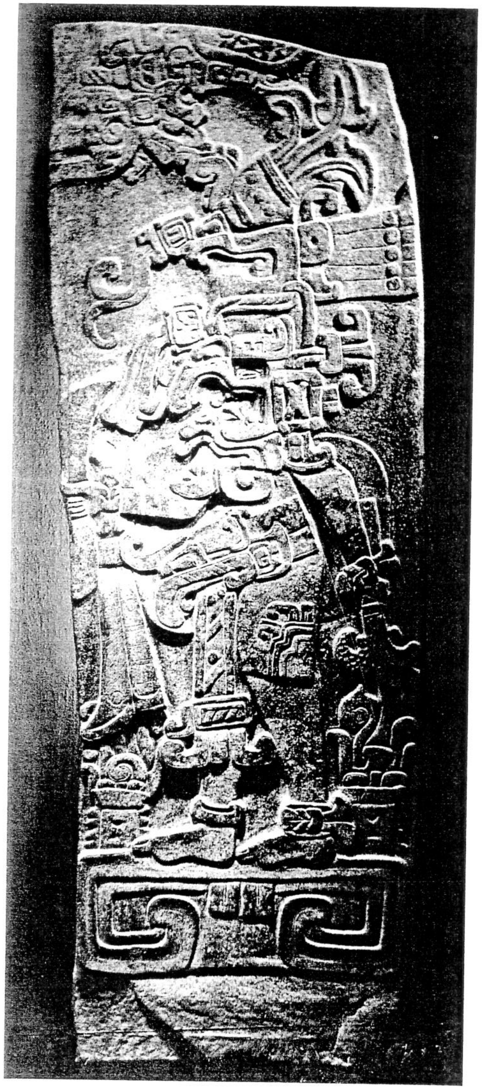
foration in the lower register. Judging by the tip of a toothed snout extant at the lower left, the base of the composition was probably completed by an upside-down profile earth dragon. Considering the flattened-U frame, which contains the head in the upper register, we might conjecture that the subject matter relates to the "birth of the Moon from the Underworld," a hypothesis presented in the discussion of Stela 25 (fig. 1.6).

KAMINALJUYU STELA 11 (fig. 1.14)

A group of early Miraflores stelae begins with the very significant Kaminaljuyu Stela 11. It was discovered in 1957 by Edwin Shook, in level terrain between Mounds D–III–10 and D–IV–2, when he reopened a pit where Gustavo Espinosa had found the smashed Stela 10 (the so-called "black altar," fig. 1.18) two years before. The fact that

Stela 11 was carved of granite, rather than of the usual local volcanic rock, contributed to the pristine preservation of its relief, although it was lying face up. It was found *in situ* under sealed floors, having fallen from a standing position facing north.

It is worth summarizing the stratigraphic notes on this excavation (courtesy of Edwin Shook), since they give the best data for dating the early Miraflores style. In brief, the Stela 10 fragments are terminal Verbena or incipient Arenal; the stela initiates the Protoclassic Miraflores style (ca. 50 B.C.–A.D. 50). The complete Stela 11 is earlier, from the Verbena phase; Stela 11 is early Terminal Preclassic Miraflores (ca. 200–50 B.C.). The two stelae belong to the extremes of the 200 B.C.–A.D. 50 period, in style variation and in established chronology. Espinosa's pit had reached a maximum depth of 125cm when he pulled out the Stela 10 fragments. Fourteen thin adobe and sand floors lay between 96cm and 140cm, and Shook found the carved face of Stela 11 lying underneath them, at a depth of 146cm. He reached sterile volcanic ash by 200cm. According to Shook, the pottery above 125cm had Arenal as the latest types mixed with Verbena, and he concluded that Stela 10 was either late Verbena or very early Arenal. The three-piece broken monument had to be situated within and above the adobe floors. Sparse pottery below the floors, associated with Stela 11, contained some certain Verbena types and only several possible Arenal sherds. Given the clear stratigraphic separation, Stela 11 has to be somewhat earlier than Stela 10 and doubtless was carved in Verbena times.



1.14 Kaminaljuyu Stela 11. Height, 183cm; width, 70cm; depth, ca. 30cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 3093. Photograph by Harold G. Russell.)

Two other lines of evidence confirm this conclusion. Both of these carvings illustrate hafted eccentric flint axes. An identically shaped chipped-flint axe head was excavated inside the Verbena-phase Tomb I in Mound E–III–3 (Shook and Kidder 1952:fig. 79c). Furthermore, the pair of three-looped incense burners with spiked sides and keyhole perforations, represented on the base line of Stela 11, are duplicated by real ceramic censers of the same period at Kaminaljuyu. Borhegyi (1956) dated this type to the Verbena phase, although it continued into the following Arenal subphase. (Lowe 1965:56 gives concurrent dating for the same type of censer excavated at Izapa.) Thus, Stelae 10 and 11 are as firmly fixed in chronology as is possible to determine from the archaeological data associated with Preclassic stone monuments.

Stela 11 was briefly described by Miles (1965:255) and discussed at some length by Norman (1976:289–290), mainly from the point of view of its many Izapan features. For example, the base panel, with incurved side elements and central tabs, is nearly identical to those on Izapa Stelae 4 and 18 and Altar 20 (Norman 1973:pls. 8,28,60). The incense burners described above are duplicated in every detail on Izapa Stela 24 (ibid.:pl. 40). The standing figure's plain stiff cape is represented also on Izapa Stela 9 (ibid.:pl. 18). Other shared Izapan motifs include what Garth Norman calls the banded bifid tongue, profile dragons, and the "diving" deity.

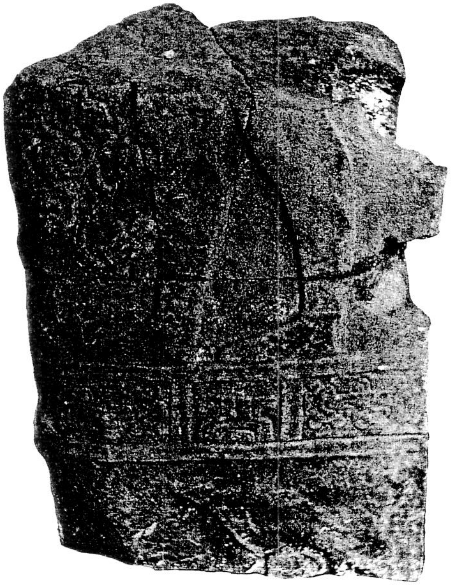
In crisp relief on several carved planes, Stela 11 depicts a left-facing warrior (or ballplayer?) standing barefoot between two "smoking" censers on a terrestrial band.

Considerable detail is carried out with fine-line incising. Peering downward from the celestial zone is a "serpent-bird" with a long-lipped dragon head and two serpent-framed wings with glyphlike infixes of the sort described for the contemporary Arenal Altars 9 and 10 (fig. 1.3). The upper wing has a *kin* sign, and the left wing has a volute scroll. The figure wears a winglike cape, a short kilt, and a thick, two-part belt with frontal dragon and long, hanging, "banded bifid" tongue. A profile dragon mandible, with a Miraflores-style squared scroll behind its curving tongue, appears under his chin. On his head rests a stack of three dragons, the lowest of which encases his face as a helmet. The forehead of the dragon headdress above the helmet is replaced by a three-leafed tropical-plant motif. (This motif is duplicated in the headdress of a somewhat later Proto-Maya incised greenstone figure [M. D. Coe 1966:fig. 7]; for good drawings of four of the Stela 11 dragon masks, see Miles 1965:fig. 3e–h.) The figure holds in his left arm the hafted eccentric-flint axe and in his right a scepter. The wrists and left ankle have knotted bows, while the right ankle has a crescent-shaped ornament. There is a band around the biceps of the right arm. (Laterally differentiated arm and leg ornamentation often indicates ballplayer costuming.)

The celestial serpent-bird has not only glyphlike wing infixes, but also a plumed U glyph in a cartouche in front of its nose. An identical sign is placed in front of the nose of the vegetal headdress dragon, from which flows a graceful thin bifurcated scroll. A plumed glyph, like those hypothesized in the discussion of Altars 9 and 10 as possibly being prototypes for the Maya day glyph *Akbal*, is found in the same position in front of the helmet dragon. Its large earplug contains a St. Andrew's cross and has a tassel similar to the tongue finial on the belt dragon. All four cartouche signs have beaded corners. The belt dragon has a tabbed U symbol behind its jaws, and one-half of a generic scrolled cartouche enclosing an incised U is seen on the figure's kilt. Despite certain borrowings from Izapan iconography, this stela demonstrates the beginning of Miraflores—if not Proto-Maya—canons in the highlands.

ABAJ TAKALIK STELA 3, RETALHULEU (fig. 1.15)

We turn to Abaj Takalik, on the coast, for a stylistically related stela fragment (see Miles 1965:figs. 8g,16g; Parsons 1967:fig. 7b). The existing lower half displays a left-facing personage standing on a bordered base panel. Like Kaminaljuyu Stela 11 (fig. 1.14), this stela is unframed. The concept of its terrestrial panel is Izapan, but the style of the figure is Miraflores. The three-part base panel has two outward-directed, profile dragon heads flanking a glyphlike sign, with tabs and scrolls above and a U symbol within (like the kilt sign on Stela 11). This may be a generic prototype for the Maya Initial Series Introductory Glyph (Parsons 1973:210). The human figure seems to be barefoot, though Miles (who discovered it) suggested to me that original red paint on the feet below the pecked ankle lines connoted socks (analogous to the netted socks on Stela 24 at Izapa). Just above the knees are knotted garters. The only other adornment



1.15 Abaj Takalik Stela 3. Fragment, lower half. (Museo Nacional de Arqueología y Etnología, Guatemala. Photograph by the author, courtesy of the Milwaukee Public Museum.)

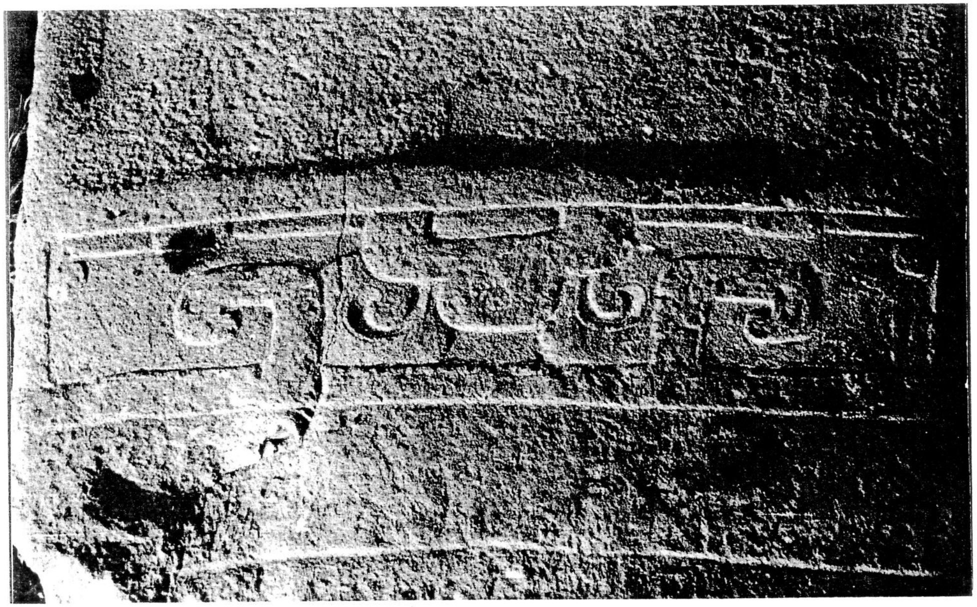
is, on the left, the base of a belt dragon head, below which falls a thin spiral with three sinuous scrolls. The beaded cartouche with U infix at the end of one scroll is identical to the glyph (and its thin, bifurcated scrolls) on the headdress dragon of Stela ll.

KAMINALJUYU STELA 26 (fig. 1.16)

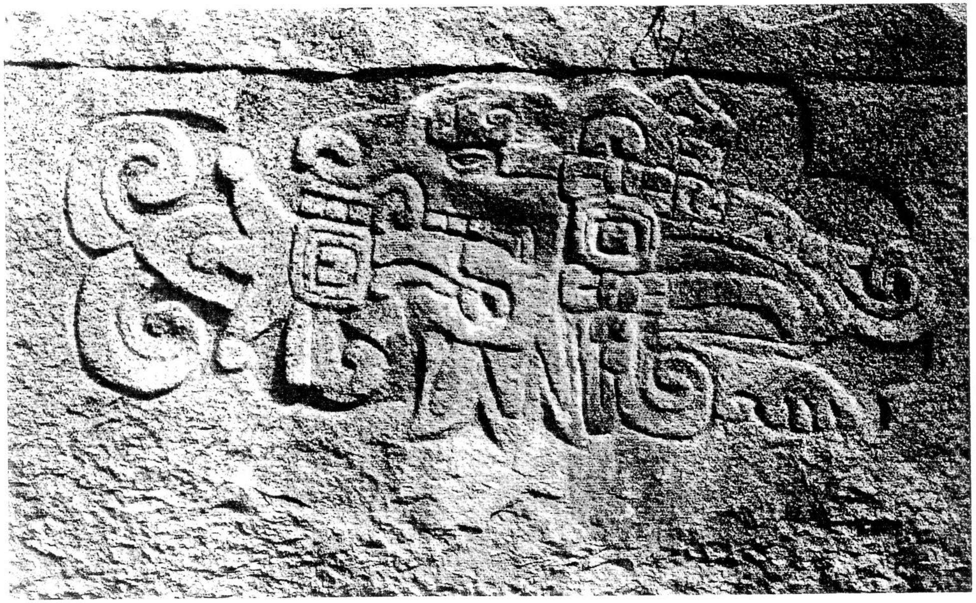
The Kaminaljuyu Project found the large Stela 26 in two separated pieces in the Lower Plaza of the Palangana. Both sections lay in the upper levels of the "shrine-atrium" compound, associated with other secondarily deposited Preclassic monuments, including the early Arenal Stela 25 (fig. 1.6). The larger, lower portion was centered above Tomb 1, and the plain upper third was located about 4m to the southeast. An Izapan-derived basal panel (fig. 1.16) remains in an excellent state of preservation. Below it, a smooth-pecked base supports the stela. The entire scene above the terrestrial band was deliberately pecked away, leaving only the faintest traces of a narrow framing border, as well as indications that the whole front once bore an elaborate low-relief carving. The style must have been early Miraflores, judging from related stelae of the period, but we can discuss only the basal panel, a framed rectangle with incurved scrolls, like that on Stela 11 (fig. 1.14). The central, scrolled trefoil sign looks like an upside-down variant of the glyph on Stela 3 at Abaj Takalik (fig. 1.15). In addition, thin, abbreviated, outward-directed serpent-mouth signatures underline the top frame. On the reverse side of the stela, two parallel bands follow the level of that panel. Rectangular defacing indentations on the back suggest that it was carved before ceremonial destruction. If so, this would be the only known southern stela carved on both front and back, as most Lowland Maya stelae came to be. Stela 26 must have been of considerable importance to have had all but its conservative "Izapan" basal panel obliterated so thoroughly.

KAMINALJUYU STELA 28 (fig. 1.17)

"Stela" 28 is the upper portion (perhaps upper third) of what was probably a wall panel in early Miraflores style. It has traces of red paint, and the edges are framed by a rounded border; the lower area was intentionally pecked away. In the top center, within a scalloped panel, a dragon monster of unique configuration faces left. It has a tripartite eyebrow and a jaw with three front teeth backed by a fanged and curved upper lip (identical to the upper-right head on Stela 10 [fig. 1.18]). A separate dragon mandible, like the chin dragon on Stela 11 (fig. 1.14) is carved directly underneath, with a trefoil emblem below; in front of the snout there is a U glyph with beaded trefoil and bifurcated scrolls, reminiscent of the dragon nose emblems on Stela 11. Behind the central head we find a rounded-square earplug with bow knots above and below; a scrolled serpent profile, extending to the right, frames what must be a wing, with a clawlike motif below. The whole forms an unusual composite "serpent-bird deity."



1.16 Kaminaljuyu Stela 26. Detail of carved base panel. Total estimated height of the two sections, ca. 300cm; width, 94cm; depth, 32cm. (Peabody Museum, Harvard University. Photograph by Richard M. Rose.)



1.17 Kaminaljuyu Stela 28. Detail, upper portion. Present height, 53cm; width, 133cm; depth, 9cm. (Jorge Castillo Collection, Museo Popol Vuh, Guatemala. Photograph courtesy of the museum.)

KAMINALJUYU STELA 10 (fig. 1.18)

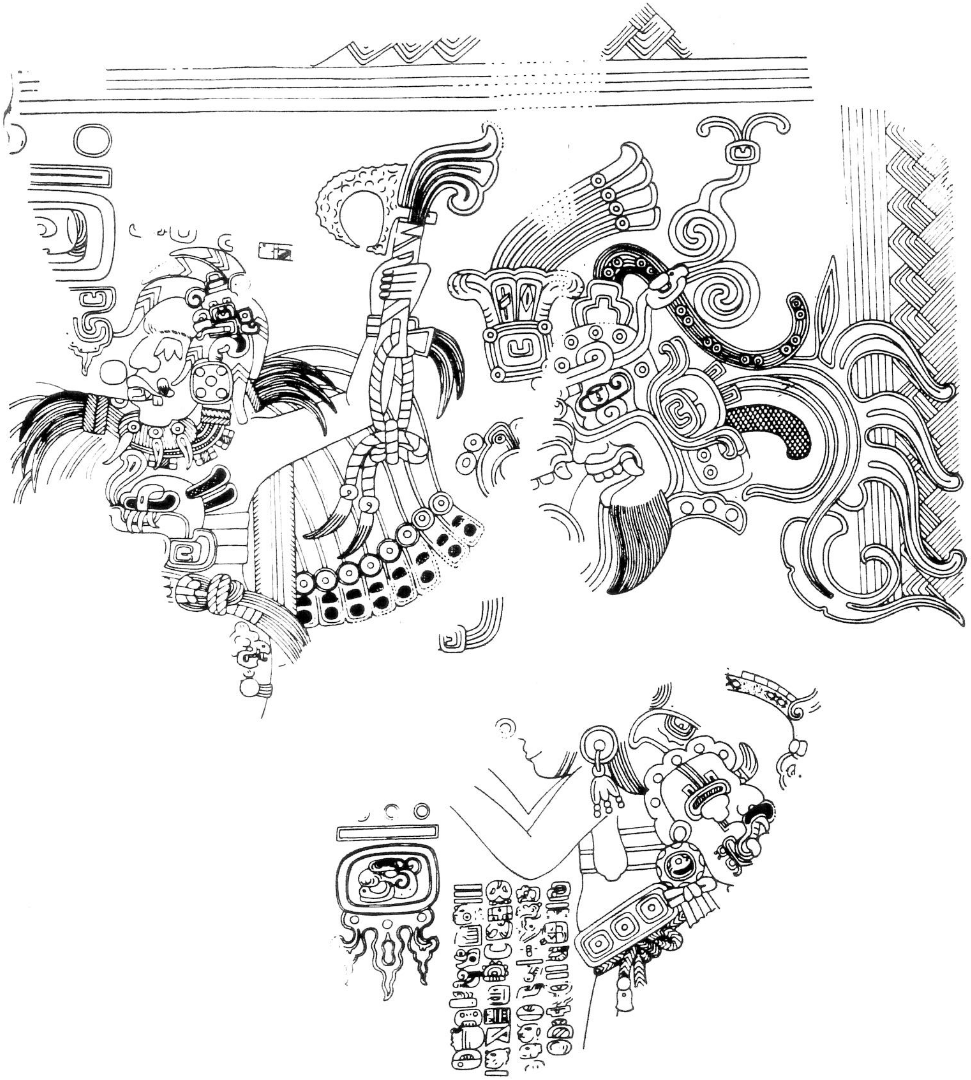
The elegant, but fragmentary, Stela 10 (also referred to as the "black altar"; see Miles 1965: figs. 3a–c, 13) inaugurates the Protoclassic facet of the Miraflores tradition, reflected also in Protoclassic pottery. It was suggested above that Stela 10 dates to the 50 B.C.–A.D. 50 Verbena-Arenal boundary (contemporary with Cycle 7 dated monuments). Its three fragments were found by Gustavo Espinosa in 1955. Although smashed and partially defaced before being deposited, the low relief of Stela 10 is marvelously preserved, probably because the material is a very hard and fine-grained black volcanic basalt. (One tiny fragment that fitted the three main pieces had been discovered five years before at the site, some 700m to the northwest [information courtesy of Edwin M. Shook].) The extreme thickness of the stone (about 1m) suggests that it probably functioned as a horizontal altar rather than as a stela or wall panel.

The complex detail of the relief carving is rendered very precisely with fine-line incising and crosshatching. Top and side borders show multilined framing with a mat-design outer margin. There are three left-facing images: in the upper right, a disembodied, full-bearded, anthropomorphic jaguar head; below, a (kneeling?) old woman with pendulous breast; and in the upper left, a warrior standing with raised axe. Glyphlike symbols, with bar-and-dot numbers (8 and 7, respectively) and pendant trefoils, are seen in front of the last two figures. Between the old woman and her "8-Jaguar day sign" are four vertical columns of (presumably ancestral Maya) hieroglyphs supplying an extremely early long text, as yet undecipherable.[4] These tiny glyphs, unlike the rest of the relief, are engraved directly on the flat background with very delicate incising. If the main relief were carved ca. 50 B.C., this inscription might have been added as much as a century later. Why the altar was broken and defaced at this time is a mystery.

Miles (1965:255–256) has described the principal motifs. The upper-right bearded and fanged head has, at the brow and in the ear position, U emblems in differing cartouches; these are replicated on other Terminal Preclassic sculptures (see Parsons 1973:figs.3, 4). Wavy foliated motifs flow off behind this figure; these are found also on the contemporary carved human femurs at Chiapa de Corzo (Agrinier 1960). It is clear that the female wore a nose bead, though her head and the offering (trophy head?) that she supported in both arms are almost completely defaced. There are torso bands under her bare breast, a thick belt with rounded squares about her waist, and a large rear belt head of a fanged, horned anthropomorph. Miles (1965:fig. 3 a, d) correctly compares this to the front belt head on Chocola's male figure (fig. 1.19). Also comparable to the Chocola sculpture is the vestige of a possible winged serpent, seen isolated

---

[4] The late Heath-Jones analyzed this inscription (Miles 1965:f.n. 11) and presented her material orally at two professional meetings (Society for American Archaeology, Utah, 1957 and International Congress of Americanists, Mexico City, 1974), but only abstracts of her findings have been published.

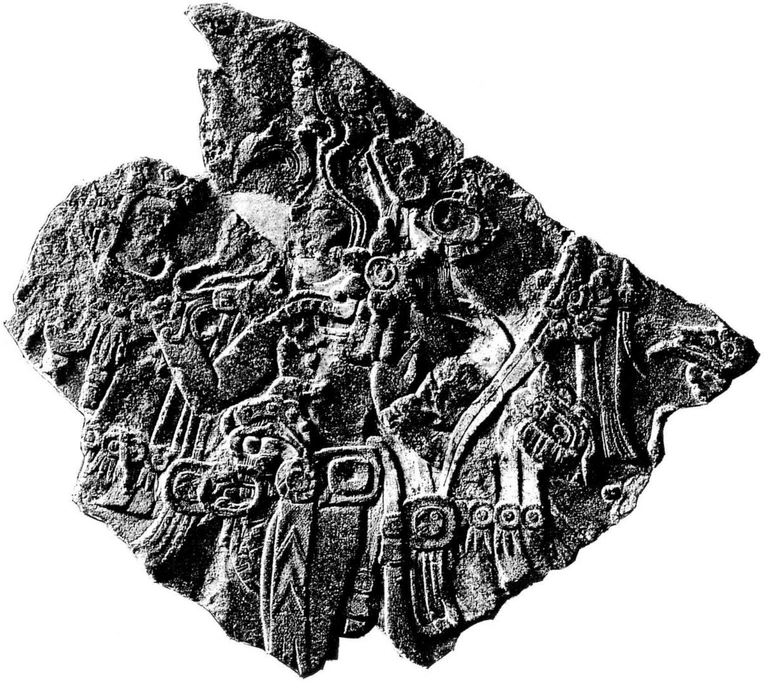


1.18 Kaminaljuyu Stela 10. Three fragments. Present length and width, 107cm by 122cm; depth, ca. 100cm. (Museo Nacional de Arqueología y Etnología, Guatemala, Nos. 2324, 8138. Drawing by Guillermo Grajeda Mena after Girard 1966:pl. 194.)

to the right. The principal male figure on Stela 10 wields a hafted eccentric-flint axe, like that on Stela 11 (fig. 1.14). This figure has a nose bead, a foliated eye (also found on the trophy heads on the Chocola stela), a tufted "false beard," and a supplementary dragon mask with forelimb (like that of some dragons on the Chiapa de Corzo Miraflores-style bones) above the "quincunx" earplug. His three-part belt is fronted by an incomplete monster head, and he wears a massive plumed and beaded cape, again like that on the figure in the next example.

CHOCOLA STELA, SUCHITEPEQUEZ (fig. 1.19)

Matching Stela 10 in style, content, and fine details of execution is the surprisingly small (only 60cm wide) Miraflores-style stela fragment from Chocola, on the Pacific slopes north of Palo Gordo. It was excavated by Robert Burkitt in the late 1920s and brought to The University Museum, Philadelphia. The greater part of the central left-facing standing figure is visible, though none of the edge pieces remain. (It was broken, and the interstices were restored with plaster.) A feathered cape with tufted beads shows on either side of the figure; the belt and belt head are nearly identical to those of the old woman on Stela 10 (although here the mouth is surrounded by a cartouche). The figure's head, with incised, almond-shaped eye and cheek markings, is

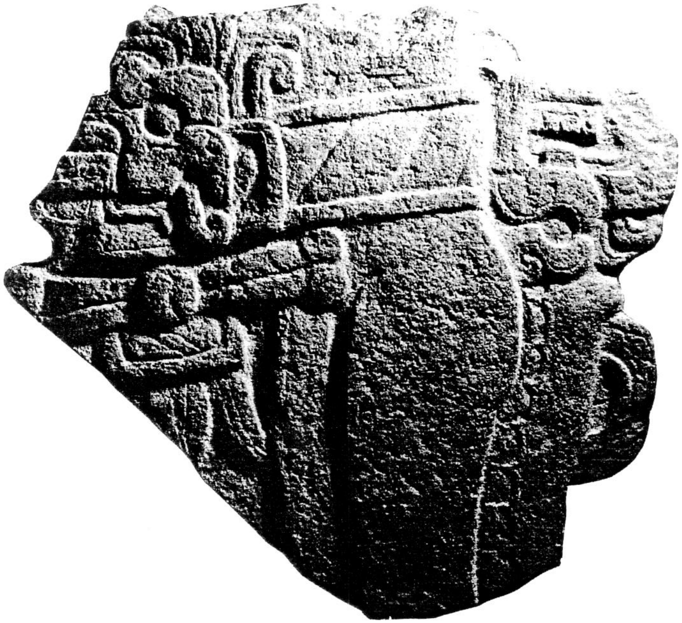


1.19 Chocola, stela fragment, Suchitepequez. Present maximum width, ca. 60cm. (The University Museum, University of Pennsylvania. Photograph courtesy of the museum.)

enclosed by a large, upended, fanged and scrolled, dragon-profile headdress with a six-pointed earplug. A damaged human trophy head rests in the crook of his left arm. Another damaged, inward-facing trophy head, with trefoil emblem below, is held out in his right hand. All three human heads have incised rudimentary beards. This important relief is replete with U symbols, as are Stelae 10 and 11 at Kaminaljuyu, and it also has a serpent-bird image on the right edge of the cape, complete with a serpent-framed wing. (The tapered element, in plaster, below the bird head clearly is incorrectly restored.)

KAMINALJUYU SILHOUETTE RELIEF 1 (fig. 1.20)

A pair of elegant silhouette reliefs may be assigned to the late Miraflores tradition. Silhouette 1 is the broken mid-section of a single, standing, skirtless human figure, reported by Lothrop (1926b:fig. 48) to have been found on Finca Miraflores. There is a thick, diagonally banded belt about his waist and above his bare thighs. A profile dragon head with pendant trefoil symbol and large knotted bow is attached to the front of the belt. An upside-down dragon head serves as a bustle; below this, a serpentine body, with scalloped markings and a projecting scroll or U motif, follows the curve of the buttocks and leg.



1.20 Kaminaljuyu Silhouette Relief 1. Mid-section fragment. Height, 46cm; width, 51cm; depth, 7cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 2235. Photograph by Richard M. Rose.)

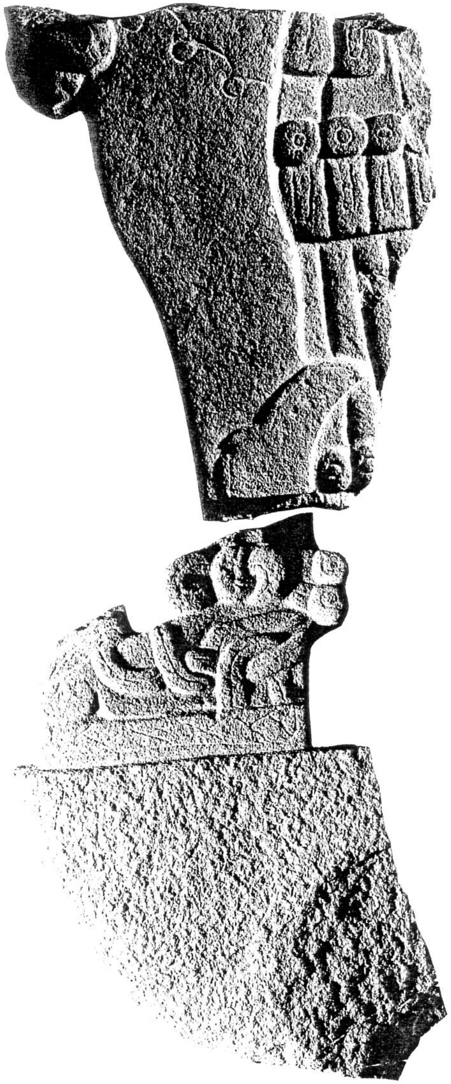
KAMINALJUYU SILHOUETTE RELIEF 8 (fig. 1.21)

Silhouette 8 is one of the most impressive of this series, even though we have only two fragments of it, leading from the upper thigh down to the pedestal base of a life-sized, standing human figure. (The upper halves of these silhouette sculptures seem to have been systematically destroyed at a later time.) The pieces were found together in the large Mound C–III–11, when that earthwork, of secure Arenal ceramic phase, was demolished in the early 1960s. Joya Hairs recovered the fragments and presented them to the Museo Nacional in Guatemala. An elite personage, with the loop-laced sandals common to the period, is represented. Three tiers of plumes with tasseled circular beads fall from a rear bustle. Incised on the upper thigh is what appears to be a beaded fringe for a short kilt. In front of this is the end of a bow, which must be the base for a former belt head. The indented ankle cuff matches that on the wrist of Silhouette 4 (fig. 1.9). The foot section shows a knotted and beaded bow above the sandal. Its sole has an incised mat design, and there is a trace of a former scroll above the toe. This and the following two monuments, with related features, probably date to the second century A.D., at the end of the Terminal Preclassic sequence in the Southern Maya area. They have definite mid-Cycle 8, Early Maya characteristics.

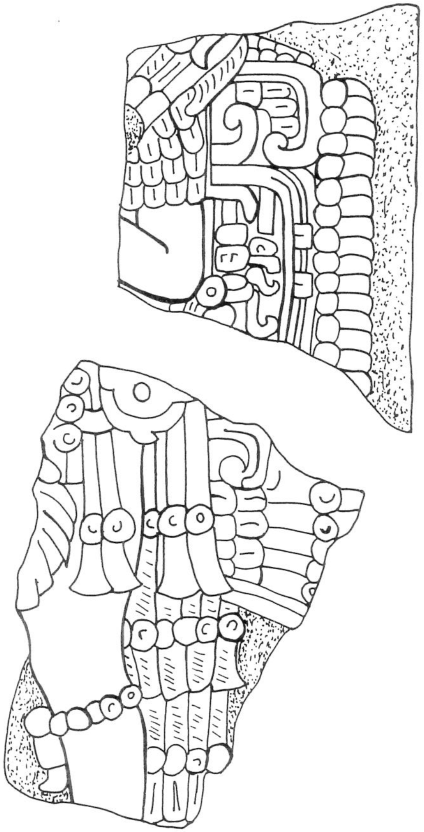
KAMINALJUYU STELA 2 (fig. 1.22)

Rarely can two parts of a broken sculpture, found at different times and places, be brought together. This was the case for Kaminaljuyu Stela 2. The lower fragment was reported by Lothrop (1926b:fig. 46b), while the upper fragment turned up about twenty years ago. Miles, the first to recognize that they belonged to a single, life-sized, left-facing, standing human figure, published them as such (1965:fig. 17b; the layout artist did not align the leg and torso photographs correctly). Although the lower part has suffered more erosion than the upper part, the two sections are identical in workmanship and thickness, and they show the continuation of the same details, despite the absence of a connecting slice of stone.

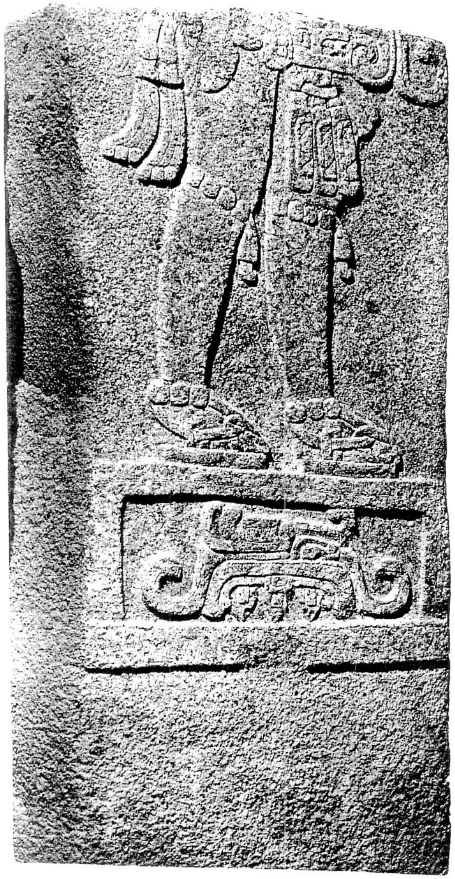
This ornately costumed warrior is carved in low relief on a plain, unframed background. The upper fragment contains a bent left arm beneath a short, feathered shoulder cape. A diagonal device over the shoulder indicates that his left hand held an *atlatl*, a relatively early depiction of this weapon. A large beaded and feathered cape on his back extends well behind the thigh on the lower fragment. Within this cape are seen a central, abstract, profile demon mask and rounded, rectangular scrolls. The skirtless left thigh and leg show a beaded garter below the knee, identical to those depicted on the next stela, from Bilbao. The tiers of beaded feathers immediately behind probably fall from a separate bustle. Conceivably, the right leg was carved also. The figure's waist was elaborately decorated with unknown frontal elements and perhaps an upside-down crested head on the back, from which depend two pairs of beaded plumes.



1.21 Kaminaljuyu Silhouette Relief 8. Two fragments. Total reconstructed height, ca. 90cm; height of pedestal base, 25cm. (Museo Nacional de Arqueología y Etnología, Guatemala, No. 3997. Photographs courtesy of Joya Hairs, Guatemala.)



1.22 Kaminaljuyu Stela 2. Two parts of one monument. Reconstructed total height of fragments as drawn, ca. 120cm. (Museo Nacional de Arqueología y Etnología, Guatemala. Drawings by the author; final rendering byRyntha Johnson.)

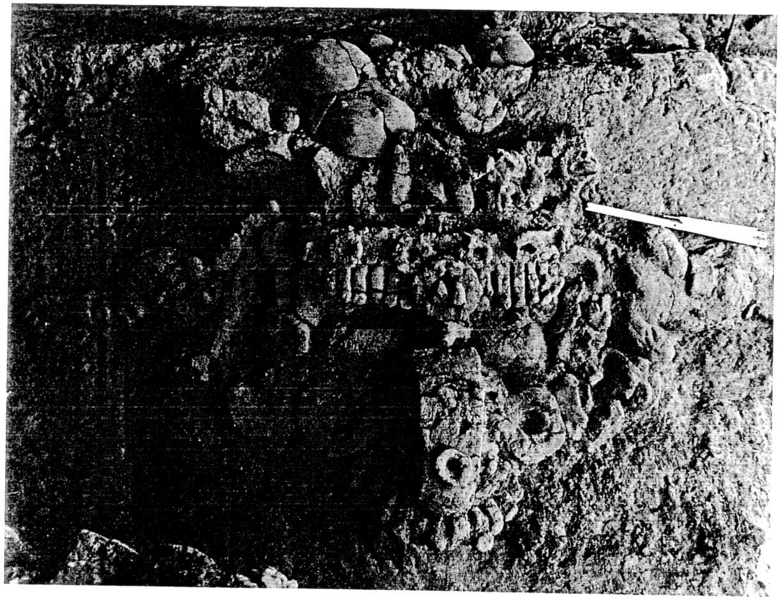


1.23 Bilbao Monument 42, Escuintla. Lower half of stela; part of the plain base out of view. Total height, 182cm; width, 65cm; depth, 43cm. (Ricardo Muñoz Collection, Finca Las Ilusiones, Santa Lucia Cotzumalguapa. Photograph by the author, courtesy of the Milwaukee Public Museum.)

BILBAO MONUMENT 42, ESCUINTLA (fig. 1.23)

Monument 42, excavated in 1963 at Bilbao on the Pacific slopes, has been thoroughly published (Parsons 1967). Unfortunately, the upper portion of this crisply preserved granite stela has never been found. In the same sculpture dump, however, the corner of a plain altar of the same granite was encountered (ibid.:fig. 4), as well as fragments of several plain stelae. A rectangular, framed, terrestrial panel, containing a right-facing profile dragon, carved above the plain supporting base, is of the Izapan mode, but the right-facing, skirtless figure standing above (broken at waist level) is entirely of late Miraflores, if not Early Maya, style. This is probably a provincial extension of the Protoclassic tradition established at Kaminaljuyu, just as the Chocola stela was, earlier in the Terminal Preclassic period. The salient features include loop-laced platform sandals, beaded anklets, beaded knee garters, tiered and beaded plumes under a rear bustle, and a profile, trophy-head demon at the waist front. Three linear shell pendants of Early Maya style and proportions hang below this and a knotted bow. In front of the belt head, there are unequal, bifurcated scrolls identical to examples on Stela 10 at Uaxactun in the Peten (see Parsons 1967:fig. 1.9e, f; Proskouriakoff 1950:fig. 1.36e, f). In 1950, the latter was considered to be the earliest Maya stela; in my opinion it dates stylistically to the outset of the second century A.D.

KAMINALJUYU ADOBE ARCHITECTURAL RELIEF, AURORA-PHASE MOUND D–III–1 (fig. 1.24). See text, p. 42, for discussion.



1.24 Kaminaljuyu adobe architectural relief. (Photograph courtesy of Joya Hairs, Guatemala.)

MIRAFLORES-ARENAL MONUMENTAL STONE SCULPTURE

Because of the significance of Style Division IV in the southern area (Izapan/Arenal/Miraflores) for the origins of Classic Maya art and iconography and of other Peripheral Coastal Lowland styles, a review of some of the outside comparative data in southeastern Mesoamerica is imperative. From the century around A.D. 1, there are four Izapan-related monuments in the Coastal Lowlands and adjacent highlands bearing late Cycle 7 bar-and-dot calendrical dates: Stela C at Tres Zapotes (32 B.C.), Stela 2 at Chiapa de Corso (37 B.C.); Stela 2 at Abaj Takalik (probably the first half of the first century B.C.); and Stela 1 at El Baúl (A.D. 37) (see M. D. Coe 1976 for a relatively recent review of these monuments). The Tres Zapotes and Abaj Takalik stelae were coupled with plain altars. Stela 5 at Abaj Takalik has an early Cycle 8 inscription (A.D. 126; J. A. Graham 1977). Its carving style fits that of the period. The famous "Tuxtla Statuette," in the National Museum of Natural History in Washington, D.C., bears the later Protoclassic bar-and-dot date A.D. 162. Altogether, a dozen monumental sculptures in the southern region have columns of numbers or hieroglyphs (some eroded beyond recognition). In addition to the five monuments listed above, there are five from Kaminaljuyu: Miraflores Stela 10 (fig. 1.18); Arenal Altars 1 and 2 (figs.1.8, 1.11); and Stelae 15 and 21 (fig. 1.10). Stela 1 at Abaj Takalik has a glyph column, as do Monument 1 at El Portón, Baja Verapaz, and Monument 1 from El Trapiche, El Salvador, which has eight vertical glyph columns.

The large El Portón example (Sharer and Sedat 1973) is a framed stela with a column of angular glyphs next to the right margin and, on the base line, a left-facing "Izapan" profile dragon with a rounded earplug and a scroll. Unlike the discoverers of this sculpture, I would assign it stylistically to the late Terminal Preclassic era. (The site also has plain stelae.) On the eroded El Trapiche fragment (Sharer 1978, vol. 1:fig. 2), a human figure is seated below four pairs of glyph columns. As drawn by Sharer, the style of the figure resembles that of the figure on the reverse of a Protoclassic greenstone pectoral from the Maya area (at Dumbarton Oaks; M. D. Coe 1966:fig. 7). The El Trapiche figure had an elaborate headdress, apparently a nose bead, a knotted bow at the shoulder, and a three-beaded wristlet (as does the Dumbarton Oaks figure); it held an animal trophy-head offering. This carving surely belongs to the late Terminal Preclassic period.

M. D. Coe (1976) has published other Protoclassic inscriptions from Southeastern Mesoamerica, most of them incised on portable stone objects. To his list can be added an incised tubular jade bead from the Cenote of Sacrifice at Chichen Itza (Proskouriakoff 1974:pl. 45 and fig. 12,1). In addition to a horizontal row of U emblems at the top, there is a vertical inscription with a possible Initial Series Introducing Glyph (or at least the *tun* sign), and five other incised glyphic positions below. Proskouriakoff is skeptical of this as an early calendrical inscription, but its style is certainly Protoclassic, if not specifically late Miraflores. There is a large group of examples of Proto-Maya texts from the period 50 B.C.–A.D. 200, the majority of which occur in the southern area or were inspired by that area. Most of them appear to be ancestral Maya, though other archaic forms of writing could have existed as well (e.g., the known Preclassic Zapotec system). M. D. Coe (1976:115), for example, does not accept the incised text on Kaminaljuyu Stela 10 as Maya, though he accepts the priority of its time of carving. The miscellaneous texts and glyphs on portable objects from the Maya Lowlands seem to postdate A.D. 50, as does Altar 1 at Polol in the Peten, with its eroded central glyph panel.

A summary of the major sculptures of Terminal Preclassic affiliation in the southern Gulf Coast and Oaxaca regions begins with the Monte Albán sphere in the earlier half of the period. Some of the "swimming" and "tumbling" Danzante slabs may belong to the early Monte Albán II phase (Scott 1978), as do the ballplayer wall panels at nearby Dainzu (Bernal 1968). The latter show specific Izapan influences. Izapan-inspired pottery also occurs in Oaxaca (Easby and Scott 1970:no. 77; Parsons 1980:no. 266). On the Gulf Coast, Tres Zapotes continued a long sculptural tradition. Its very eroded Stela A has mask panels above and below and three standing figures in the middle (Stirling 1943:fig. 3). One of them holds a trophy head by its hair, a motif that recalls the Izapan stela from El Jobo on the western Pacific Coast of Guatemala (Shook 1965:fig. 1f). Stela B at Tres Zapotes is plain. Stela C is, of course, the bar-and-dot-dated monument with an Izapan mask panel on the reverse side. Stela D, I am convinced, also belongs to this Izapan period (see Norman 1976:fig. 6.4 for a good National Geographic Society photograph). The concept of a large, open monster jaw with human figures within and a ledgelike base goes back to late Middle Preclassic Monument 2 at Izapa (ibid.:256–258). At Tres Zapotes, there is a narrative scene in the mouth, with a horizontal figure peering from above and three interacting figures below. The two standing figures wear skirts and have rounded, stiff capes identical to those on the contemporary Stela 11 at Kaminaljuyu (fig. 1.14). Moreover, the profile dragons on both outer edges of the monument (Stirling 1943:pl. 14) are dependent from Izapan scrolled celestial bands. These bands most closely resemble the celestial band on Izapa-style Stela 4 at Chiapa de Corzo (Norman 1976:fig. 6.19a). Also, the incised double scrolls issuing from their snouts are thoroughly Izapan in character. In addition, Monument C at Tres Zapotes (Stirling 1943:pls. 17, 18)—the large stone box with multiple outlined scrolls and intervening figures—is generally accepted as belonging to this style period.

Several well-known Gulf Coast monuments definitely belong to the latter half of the Terminal Preclassic and have demonstrable Protoclassic features. Monument 2 at El Mesón, Veracruz, is an enormous stela (Covarrubias 1957:fig. 68; Drucker 1968:pl. 1), which is probably very early Protoclassic. This unframed composition features a lavishly costumed and plumed central figure facing an obeisant fellow seated to his right. The composition stands on a terrestrial dragon mask with rectilinear elements reminiscent of the monster mask on Stela C at Tres Zapotes. Flanking the El Mesón mask are Izapan profile dragons. Drucker (ibid.) tried to argue that this stela is conventionally Early Classic, but I fully agree with the extensive stylistic analysis of Scott (1977:106–112), which substantiates its Protoclassic and southern Izapan characteristics.

Two other Veracruz stelae, "Matisse" and Tepatlaxco, are probably later in the Protoclassic sequence. In some respects, they anticipate the Classic Veracruz, or "El Tajin," style, though the proportions and postures of the figures relate to late Miraflores. The small "Matisse" stela, now in Tucson, Arizona (Easby and Scott 1970:no. 61), depicts a crisply carved and incised figure, with pointed beard, standing over an incised profile Izapan mask in a base panel. His lower hand seems to be holding an *atlatl* (cf. Kaminaljuyu Stela 2, fig. 1.22). The details of execution match those of the next stela, that from Tepatlaxco (Covarrubias 1957:pl. 17), which has an unusual scene of a standing ballplayer being accoutered by an attendant bending to his left. The horizontal base panel is of generic abstract Izapan design, with diagonal bars and double *tau* elements—a terrestrial signature that goes back to the Post-Olmec in southern sculpture and to the Alvarado column (ibid.:fig. 29). On the other hand, the top horizontal panel, also abstract, is non-Izapan. The diamond-and-dot motif, however, is duplicated on a contemporary jade bead from Chichen Itza as an affix to the next-to-last glyph (Proskouriakoff 1974:fig. 12,1). The principal figure has a pointed beard, beaded necklace, heavy wrapped waist padding over a kilt, footgear, and variable arm and knee padding. His lower right arm and right knee are the most heavily protected, indicating that he is being prepared to play the ballgame.

A well-known carved circular slate plaque (Easby and Scott 1970:no. 141) is generally considered to be terminal Classic Veracruz style (such plaques, or mirror-backs, are predominantly of Early and Late Classic periods). However, the distinctive sharp facial features and pointed beard (and necklace) on this example are identical to the visages on the two Protoclassic stelae just discussed, and the rather free-form incised scrolls on the perimeter could be Izapan-derived (and "proto"–Classic Veracruz in style), as are the scrolls on the Monte Albán II spouted vase from Oaxaca (Parsons 1980:no. 206). If this is so, this plaque would date to the second century A.D., making it one of the earliest circular slate plaques rather than the latest. In the subsequent Early Classic period, the squared, interlaced, El Tajin scroll style emerged, frequently associated with ballgame iconography. Further evidence for proto-Tajin art comes with ballgame paraphernalia. Many of the acknowledged early *hachas* of full-round, crested head form from Veracruz have Izapan-type rounded scrolls and other Preclassic features (see Parsons 1980:nos. 274,275). I believe that many of these date prior to A.D. 200, and that they represent in stone the dragon or anthropomorphic trophy heads attached to waist belts, shown on many Preclassic monuments. Symbolic *hachas* were, of course, actually fixed to the fronts of hip guards or waist yokes of ballplayers in the Classic period.

While there is only scattered evidence for formal architectural ball courts prior to

A.D. 400, considerable evidence exists for the rubber ballgame and its costumed players, beginning with Xochipala and Tlatilco figurines. Possible sculpture examples discussed for the Terminal Preclassic period include, in addition to the Tepatlaxco stela, the earlier ballplayer stone panels from Dainzu, Oaxaca, and the portable ringed pedestal marker from Kaminaljuyu (fig. 1.12). Kaminaljuyu Stela 25 (fig. 1.6) may represent a helmeted ballplayer, and conceivably the pair of figures on Monument 63 symbolizes the ballgame (fig. 1.5). The many representations of human trophy heads during the Izapan horizon may well demonstrate the inauguration of a form of ballgame sacrifice prevalent in later Cotzumalhuapan and Classic Veracruz art. It is not improbable, moreover, that many early stelae depicting heavy belts, frontal monster heads, and helmetlike headdresses represent ritual ballplayers—for example, Kaminaljuyu Stela 11 (fig. 1.14) and the Chocola stela (fig. 1.19), in which the figure holds two trophy heads.

Terminal Preclassic sculptural art in the Maya Lowlands seems to have been inspired largely by ongoing sculptural developments in the highland Kaminaljuyu sphere. The first southern-related art—other than a small group of earlier Olmecoid and "potbelly" monuments—appears in the Peten in middle Chicanel times, ca. 100 B.C. Much of the earliest surviving monumental art there occurs in the form of architectural relief masks, polychrome murals, and a few miscellaneous carved stones. Whereas these Lowland Maya data conform to the contemporary and parallel Miraflores and Arenal styles in the highlands and on the Pacific slopes, it is only in that southern region that the developmental roots of the styles can be demonstrated. Following is a summary of the evidence for the transfer and adoption of Late Preclassic art in the lowlands prior to A.D. 50.

The oldest monumental sculptural forms native to the Peten are applied in stucco relief to the terraces of Late Preclassic pyramids, flanking stairways. These consist of frontal anthropomorphic "jaguar" masks with earplugs, often polychrome. Their style relates to that of the early Miraflores stone censers in the highlands (Kaminaljuyu Monuments 16–18; see fig. 1.2), which, in turn, reflect an older and multifaceted tradition there (see fig. 1.1). The best-known, and perhaps oldest, stucco architectural masks are those on Structure E–VII sub at Uaxactun (Ricketson and Ricketson 1937), which may be no more recent than 100 B.C. At Tikal's North Acropolis, Structure 5D–Sub.3–3rd revealed a pair of polychrome stucco feline masks, with downturned mouths and rounded-square earplugs, flanking a staircase (W. R. Coe 1965a:fig. 17). This structure is Cauac phase (100 B.C.–A.D. 50), but the masks probably date to the outset of that era. The somewhat later (50 B.C.?) Structure 5D–Sub.1–1st also has long-snouted architectural masks (ibid.:fig. 4).

At Cerros, northern Belize, Freidel (1979) recently excavated several Late Preclassic terraced structures revealing a number of polychrome stucco monster masks of both "blunt-nosed" and "long-nosed" variety (see Freidel and Schele, this volume).

On the basis of comparative evidence from the highlands, these probably date to the early half of the first century B.C. I have mentioned above the direct correspondence between a relief profile dragon jaw on Structure 6B at Cerros (ibid.:fig. 8) and one on Kaminaljuyu Stela 22 (fig. 1.7), which I would like to date ca. 50 B.C. David Freidel kindly sent a copy of his 1980 illustrated manuscript fully discussing four frontal architectural masks, with elaborate flanking reliefs, from Structure 5C–2nd at Cerros. The components can be matched in considerable detail with contemporary early Miraflores and Arenal sculptures, but the comparisons here will be limited to Arenal Altars 9 and 10 at Kaminaljuyu (fig. 1.3), whose winged, long-snouted dragon carvings presumably date to ca. 100 B.C. One rounded-square earplug on a Cerros mask is identical in every detail—top scroll, upper and lower bow knots, and beaded bell-shaped pendant—to that on Altar 10. Furthermore, the extreme flanking downward-directed dragon jaws on all four 5C–2nd compositions are identical to the downturned jaws flanking the front and rear of the serpent-birds on Altars 9 and 10 (fig. 1.3, right).

Two stela fragments in the Maya area belong stylistically to the early Terminal Preclassic. Stela 2 from El Mirador (fig. 1.4) is perhaps the earliest carved stela known from the lowlands. I suggest that it dates to the early half of the first century B.C. The front side (not illustrated) shows a standing skirtless figure from the waist down, with wrapped knees, which compares with early Arenal Stela 25 at Kaminaljuyu (fig. 1.6). However, the long-snouted dragon profile on the reverse (fig. 1.4) can be more confidently placed in comparison with highland sculptures. The rounded-rectangle eye, the tight nose scroll, the sharply bent and downturned snout, the three-tooth row, and the rear mouth scroll appear on the central monster heads on Altars 9 and 10 (fig. 1.3) and Stela 25 (fig. 1.6) at Kaminaljuyu, though on the latter the sharply angled snout of the three-toothed earth dragon turns in the opposite direction. The other early example, Miscellaneous Stone 69 at Tikal, consists of two upper fragments of a small, smashed stela found ceremonially buried in Cimi-phase fill (A.D. 50–250; W. R. Coe 1965b:22). Stylistically, however, I would place this ca. 50 B.C., and agree with W. R. Coe (1965a:1417) that it is Miraflores-related. The complexly surrounded human face has an eye like that of the Chocola figure (fig. 1.19), the upper profile dragon has a tight-volute snout like that on the headdress dragon on the same Pacific slopes stela, and the scroll eyebrow of the Tikal dragon matches that on the contemporary Kaminaljuyu Stelae 22 (fig. 1.7) and 28 (fig. 1.17).

Two series of wall paintings from the North Acropolis at Tikal, dating to 50 B.C.–A.D. 50, demonstrate the beginnings of truly Protoclassic Maya art there. Despite their more cursive style, which derives from the nature of the medium, they may be equated with outside developments. The first mural fragments are from Cauac-phase Burial 166, the first corbel-vaulted structure in the lowlands (W. R. Coe 1965b:16). These black-line-on-red frescoes date to 50 B.C. (W. R. Coe 1965a:1413). Two of the seated figures relate in posture to Arenal Monument 63 (fig. 1.5) and Altar 1 at Kaminaljuyu (fig. 1.8), as well as to the somewhat later incised figure on the Dumbarton Oaks pectoral (M. D. Coe 1966). The stylistic character of the various figures, as well as the featherwork and loose, thin, two-part scrolls, relate in spirit to both Stela 10 at Kaminaljuyu and the Miraflores Chocola stela (figs. 1.18, 1.19). Structure 5D–Sub.10–1st at Tikal, which has polychrome murals on the outside walls of its shrine, is dated by W. R. Coe (1965b:18–19) to 25 B.C., only a generation later than the Burial 166 paintings. On stylistic grounds, especially the form of the many broad opposing "rounded-square" scrolls, we would propose that these murals may actually belong to the first half of the first century A.D., at the very end of the Cauac phase. The double-banded and three-beaded arms on the standing figures are even closer in style to the Dumbarton Oaks pectoral than those on the burial frescoes. All the scrolls fringing these figures are like those attached to the contemporary Silhouette 4 at Kaminaljuyu (fig. 1.9), and they anticipate those found on Bilbao's Monument 42 (fig. 1.23).

Additional Lowland Maya monuments may be assigned to the A.D. 50–200 Protoclassic phase, and a few early Protoclassic decorated vessels mirror the monumental arts of the Izapan period, probably going back to 50 B.C. in style. The spouted pottery bowl from La Isla, Tabasco (Stirling 1957:pl. 66a), has an elaborately carved rectangular panel with an upended profile dragon and masses of rounded scrolls of highland Guatemala style. (There is also a large Protoclassic carved celt from nearby Río Candelario [ibid.:pl. 69a].) A carved stone vase at Dumbarton Oaks (Willey 1974:pl. 177), of unknown provenience, bears a sinuous serpent-monster, whose incised details match the Miraflores Stela 10 at Kaminaljuyu (fig. 1.18), and an extremely complex carving on a spouted stone bowl in a private collection (M. D. Coe 1973:16–17) duplicates the style of the same altar—Coe even conjectures that the object came from Kaminaljuyu. The layout of its two contorted figures also resembles Horcones-phase carved bones at Chiapa de Corzo—themselves of early Protoclassic Miraflores style and date (Agrinier 1960). One of the figures has serpent-wing arms like the wing shown on the Chocola stela (fig. 1.19). Given the five Proto-Maya glyphs on the spout, this bowl may date closer to A.D. 50.

The Maya Lowland monumental relief carving in the cave at Loltun, Yucatan (Proskouriakoff 1950:fig. 38b), is generally acknowledged to belong to the Izapan horizon (see drawings in Norman 1976:fig. 6.24). I place this carving stylistically in early Cycle 8, the second half of the first century A.D. There is a short glyph column to the upper left of the standing human figure, who wears a nose bead and holds a serrated staff (spear?) in his right hand and, in his left, a hooked wand equivalent to the much earlier scepter on Stela 11 from Kaminaljuyu (fig. 1.14). His belt design also resembles those on the earlier Chocola stela (fig. 1.19) and black altar (fig. 1.18), but the profile belt dragon has three shell danglers of late Arenal type. The diagonal beaded hip ornament is a motif seen not only on the 50 B.C.–A.D. 50 Stelae 1 and 2 at Abaj Takalik (Thompson 1943:110), but also on the Early Classic, fourth century A.D. Leiden Plaque and Uolantun Stela 1 (Proskouriakoff 1950: figs. 41a, 37b), as well as on other stelae before the close of Cycle 8. Two other stela fragments from El Mirador, the site with the earliest Lowland Maya stela, should belong to this Protoclassic period (unpublished drawings of its Stelae 3 and 4 were shown to me by Ian Graham). Hammond recently reported (1982) a small, pecked, plain stela from Cuello, Belize, which he dates to A.D. 100. Stela 10 at Uaxactun (Proskouriakoff 1950: fig. 36e, f), carved on both faces with simple standing figures and broad bifurcated scrolls, also probably belongs to the early second century A.D. On these, the toe of one foot does not touch the heel of the other, following Izapan-horizon mannerisms. Cited in comparison with Kaminaljuyu's late Arenal Altar 2 (fig. 1.11) was the early Cycle 8 Altar 1 from Polol (ibid.: fig. 36c). Like the highland altar, this one depicts two headdressed figures facing a central eroded panel of glyphs.

Thus, before the close of the Terminal Preclassic, there was both the culmination of Preclassic monumental art in the southern area and its derivative entrenchment in the Maya Lowlands. In the following Early Classic transition, A.D. 200–400, all the essential aspects of Maya art began to emerge in their unique fashion, with only residual traces of the prior Izapan-style period. However, this is still the last half of Cycle 8, before the full crystallization of Classic Maya art in early Cycle 9, at the outset of the fifth century A.D. (see Proskouriakoff 1950).

The Early Classic Transition: A.D. 200–400

This period corresponds to the Aurora phase at Kaminaljuyu. Because there is little sculpture in the highlands from that time, I shall review first the late Cycle 8 Lowland Maya sculpture. It is in that area of southeastern Mesoamerica that the sculptural tradition was dominant. The close of this period corresponds to the beginning of Middle Classic Mexicanized modes, which were especially strong in the southern area. This period should be called "transitional" only with respect to the development of Classic sculptural art in the Maya area. It is not transitional with respect to the Sculpture Division V styles in the southern area, which became totally non-Maya after A.D. 400. This period, an interim, if not a hiatus, in sculptural art, must have been an era of profound social change, for what was formerly explicitly Proto-Maya in the highlands never developed further there. That tradition had shifted entirely to the Maya Lowlands.

The miniature "Hauberg" stela (Easby and Scott 1970: no. 169; see Stuart, this volume) should be placed, I believe, at the outset of the third century A.D. Although of unknown provenience, its style is certainly that of mid-Cycle 8. There is an Early Maya glyph column to the left and a double row of hieroglyphs at the base. The standing figure cradles a long, flaccid, serpent in the manner of the earlier Cycle 8 Stela 5 at Abaj Takalik, or the later Leiden Plaque. On the Hauberg version, there are attached climbing figures, and a serpent head with a peering human head in its jaws hovers over the composition. (Ian Graham showed me an unpublished drawing of a stela of related style from Laguna San Diego, halfway between Flores and Yaxchilan; he dates it to the Cycle 8.10–8.15 range.)

It has been established that Tikal Stela 29 bears the earliest recorded Initial Series calendrical inscription in the Maya area (8.12.14.8.15, or A.D. 292). A peering deity hovers over the personage on its front side. The next dated object (8.14, or A.D. 320) is the famed portable jade plaque named the Leiden Plaque for its present location, although it was found in the lower Motagua Valley. The standing personage on its front demonstrates all the principal Early Classic Maya features, including belt heads with tripart shell danglers. Uaxactun's eroded Stela 9 (Proskouriakoff 1950:fig. 37a) is also dated to 8.14, while its Stela 5 (ibid.:fig. 38a) dates ca. A.D. 380. The figure on the latter carries an *atlatl* in its left hand (cf. the earlier Stela 2 at Kaminaljuyu, fig. 1.22). Stela 1 from Uolantun (ibid.:fig. 37b), dated ca. A.D. 400, completes the list of principal stelae from the lowlands in this Early Classic, late Cycle 8 era.

In regard to subsequent Middle Classic events in southeastern Mesoamerica, it is significant that Stela 18 at Tikal (ibid.:fig. 38c), dated to the very close of Cycle 8, A.D. 400–435, has a Mexican-type Tlaloc motif, with circle-and-triangle headdress, in front of its torso. This is comparable to the A.D. 435 stela from El Zapote, in the Peten, with its Mexican year sign in the same position (Easby and Scott 1970:no. 170). The Late Preclassic lowland tradition of applying stucco relief masks to terraces of pyramids also continued during the Early Classic at Tikal.

The paucity of monumental sculpture at Kaminaljuyu during the A.D. 200–400 transition phase has been contrasted with the situation in the Peten. Terminal Preclassic monuments may have continued to be displayed and honored, however, though many of these were soon to be defaced, smashed, and scattered. There is some minor evidence of such monuments from Mounds D–III–1 and D–III–13, both securely dated to the Aurora ceramic phase. Mound D–III–13 was excavated by Heinrich Berlin; in front of it he found the erected plain Stela 24 (Berlin 1952:fig. 6). Whether this monument was manufactured in this period or resituated from some former Late Preclassic context cannot be determined. Terraces on Mound D–III–13 were also decorated with mud-stucco floral reliefs (ibid.:figs. 9, 10)—a technique more dramatically exposed on nearby Mound D-III-1 in 1962 (fig. 1.24; see Miles 1963:35; D. Stone 1972:90–91). The clearing of the façade of Mound D–III–1 was supervised by Suzanne Miles. This unusual mud-plastered mound had framed stepped platforms with unique inlaid disks of obsidian (see Girard 1966:pl. 197) and an applied high-relief adobe architectural mask, as well as applied, mud, seated human figures (Miles 1963). The monster mask (fig. 1.24) had a fringed headband; long, looped snout; and flanking mouth scrolls. (Extensions on either side of the head may represent attenuated limbs; if so, this would be a "diving god.") The snout form recalls the loop-nosed incense-burner type, which, according to Borhegyi (1956:4), came into use in the Aurora phase. Since these are the only known architectural masks at Kaminaljuyu, and are positively dated there to this Early Classic phase, I propose that they imply "reverse diffusion" of a sculptural mode from the Peten to the highlands.

A period of extreme vulcanism centered in western El Salvador (Sheets 1979) at this time, ca. A.D. 250, may have induced severe disruptions of agricultural productivity in much of the Southern Maya region, perhaps accompanied by political instabilities, as well as a decline in the elite arts. In contrast, the Central Lowlands experienced comparative stability during this period, with continued demographic and economic growth (stimulated in part, perhaps, by immigration?) that would have enhanced a dynastic society already validated by a compelling "classical" art style. One might surmise that the Central Lowland area assumed an increasing intellectual and religious leadership as well. Additionally, any postulated weakening of the Southern Maya region may have made this area a potential target of intrusion by the expanding Mexican states, most particularly Teotihuacan, both for access to exotic economic resources and as a port of entry to the competitive Central Maya area.

2

DAVID FREIDEL AND
LINDA SCHELE

Symbol and Power: A History of the Lowland Maya Cosmogram

The Origins of Lowland Maya Art

In 1927 the Carnegie Institution discovered at Uaxactun Structure E–VII sub. There was no doubt about its great antiquity, and, despite many unique features, it was clearly in a direct line to later Maya architectural accomplishments; this was a sculptured building in the Lowland tradition (Proskouriakoff 1946:5). Subsequently, there was a long hiatus in the uncovering of early Lowland remains, corresponding to rich, enlightening research into the early cultures of the Highland Maya and the documentation of the Olmec as the earliest culture of all. It is not surprising that the search for the origins of Lowland Maya art focused on territories surrounding the Maya Lowlands.

The excavations into the North Acropolis at Tikal carried out by the University of Pennsylvania during the late 1950s and 1960s mark a watershed in the issue of Lowland origins. The deep cuts and tunnels revealed architecture and tombs of civilized Maya predating the time of Christ. Unfortunately, while stratigraphic and ceramic controls were vastly improved over those at E–VII sub, the stucco decoration on buildings was preserved only enough to demonstrate a general resemblance to the masks of the former structure. Nevertheless, knowledge of Tikal during the Preclassic took Uaxactun out of the category of the unique and opened the way for consideration of indigenous roots for the Lowland tradition, for, while it was clear that the Preclassic Highland Maya were precocious and advanced in their arts, it was also evident that their pyramids were undecorated. The Highlanders preferred stone sculpture as the monumental medium. The sculptured pyramid appears to be a Lowland invention.

Since the Tikal Project, a number of Preclassic Lowland Maya sites have been investigated. It is now possible to suggest not only that the sculptured pyramid is early in the central Peten, but that it is distributed widely throughout the Lowlands during the Late Preclassic period. At Acanceh, Seler (1902–1923, vol. 5:389–404) recorded a monumental plaster mask flanking a stairway on the southern face of the great pyramid. Stylistically, there are now grounds for placing this northernmost example in

Late Preclassic times. In the Eastern Littoral of Belize, at the prodigious site of Lamanai (Pendergast 1981), on Hillbank Lagoon, Structure N9–56 has a Preclassic phase carrying well-preserved masks in plaster and paint. Recent investigations at the enormous center of El Mirador, in northeastern Peten, have exposed plaster masks dating to the Late Preclassic period on Structure 34, part of the El Tigre complex (Matheny 1980). Finally, in Belize, research at the Late Preclassic center of Cerros (Freidel 1981) has unearthed several decorated buildings.

In sum, available evidence suggests that the sculptured pyramid is indigenous to the Lowlands and that it is, moreover, a regional invention without a birthplace in any one sector. In light of the practicalities of invention, this assertion is suspect. The accommodation of current data will be presented in two stages. It will be shown that (1) the sculptured pyramid first appears in the record suddenly and without developmental precedent (accompanied by drastic changes in the scale and formality of central places), and (2) the current corpus of compositions and motifs found on Late Preclassic decorated buildings is finite and comprehensible as a regional totality.

Art and Architecture: Revolutionary Conjunction

THE FIRST STAGE OF THE ARGUMENT

The first stage of the argument will be introduced at Cerros, which has produced many surprises, the most significant being the sudden and dramatic developmental change that occurs there sometime after 100 B.C. Today, Cerros appears as a cluster of mounded pyramids jutting into Corozal Bay; this typical "ceremonial center" is surrounded by a dispersed compact arrangement of smaller public and private buildings. Underlying the center, however, is a very different sort of settlement: a dense, nucleated community (Cliff 1982; Freidel, Robertson, and Cliff 1982; Robertson and Freidel 1986). Excavation into remains of this earlier community, which is dated to early Late Preclassic times, ca. 350–50 B.C., shows that, while there were periods of expansion and new house sites were added, homes were remarkably stable, once they were situated. Moreover, the buildings of perishable materials were refurbished frequently, with minor changes in size and layout. Burials associated with this "village" of perhaps a thousand souls show an egalitarian distribution of furniture—mostly pots and everyday tools—with little regard for sex or age.

At some time after 100 B.C., the eastern sector of this community, the only sector extensively investigated, became more formal in layout, with the addition of masonry building platforms and a 16m-by-16m, 2.3m-high pyramid along the western edge. Calibrated radiocarbon gives a date of 90 B.C. ± 50 for charcoal associated with the construction of the stairway on this little prototype for what would be the largest building at Cerros. Although the building is designated 2A–Sub 4–1st, it is a one-shot construction, decorated with apron moldings over inset panels and a substantial basal molding, and painted plain red on plaster. We do not know what other, more elaborate buildings might be contemporary with this one, for tunneling proved impossible at Cerros and trenching the big pyramids is treacherous; but the structure seems to be the modest beginning of a ceremonial center.

It did not remain modest for long. Within a hundred years of its construction, Structure 2A–Sub 4–1st was ceremoniously terminated with the smashing of large quantities of pottery and other materials. Then this building and the entire village to the east were buried under an average 3m of rubble to form a grand plaza fronting an equally grand acropolis, Structure 4, which has almost exactly the same orientation as 2A–Sub 4–1st but is 58m by 68m at the base and over 10m high. It rests atop the 3m of rubble and faces out across the plaza that extends to the east.

The axial trench through this acropolis was supposed to yield the kind of intricate construction history found in Tikal's North Acropolis. Instead, after a primary and secondary staircase, excavators found themselves in a maze of construction pens filled with rubble, gravel, and marl. Eight meters down from the upper plaza of the acropolis, digging exposed a roughly grouted core building, which had formed the nucleus of a single massive public work. There may be diminutive buildings deep underneath Structure 4, but it is clear that the bulk constitutes a single design and effort. The volume of Structure 4 is roughly 32,000 cubic meters (Scarborough 1980:appendix A), or about twice that of the North Acropolis at A.D. 1. The secondary substructure, Structure 4B, was definitely decorated with painted plaster, but, unfortunately, no preserved sections were found in the limited test exposures there.

Excavations on Structure 3, the third largest acropolis in the center, were less extensive but yielded analogous results. Structure 3 is 38m by 58m at the base and 7m high at the top of the secondary substructure. A 2m-by-3m test trench on the main axis of this secondary substructure went 2.6m deep without evidence of internal buried construction, although pen walls were found. Another test pit on the upper plaza of the acropolis, below and south of the first, went 2m in construction fill—roughly half the height of the acropolis at this point—but no earlier buildings were uncovered. Finally, a proximation trench on the southern stairway of the acropolis, where it opens out onto its plaza (Feature 8), showed that there was only one stairway, that it was built in conjunction with the plaza before it, and that the plaza was a single construction effort on top of a paleosol containing scattered early Late Preclassic trash. In sum, Structure 3, like Structure 4, appears to have been a single major construction effort with possible minor modifications.

Excavations on Structure 6 were also of limited extent, but they, too, suggest that this, the second largest acropolis in the center, was the product of a single major construction effort. Structure 6 measures 55m by 64m at the base and a total of 13m in height. Tests were placed into the raised plaza of the acropolis, a flanking secondary substructure, and the summit. The plaza test showed a series of closely set floors underlain by large boulders. The secondary substructure showed marl-packed rubble. The summit test, carried to a depth of 2m on a main secondary substructure 5m in height, documented a single construction episode, at least to that depth, and yielded an offering of seven vessels—unequivocally Late Preclassic (Robertson-Freidel 1980). Exposure of the front (south) side of the main secondary substructure, 6B, revealed fragmentary remains of masks and other decoration and showed that there was a single stairway on the building. At the very least, Structure 6 in its final Late Preclassic form was a massive construction effort.

Structure 5C is the smallest pyramid in the center at Cerros and the most comprehensively excavated. There were two main construction episodes, 5C–1st and 5C–2nd. Clearing of 5C–1st showed that it had carried large masks and plaster decoration on its lower terrace, while its upper terrace was a set of plain steps around the building. Unfortunately, the decoration was completely ruined, although the fragments showed it to be an "advanced" polychrome (including blue/green, yellow/gold, and black outline; see Freidel 1981). An axial trench up the stairway exposed the well-preserved stairway of Structure 5C–2nd and also yielded an offering of two Late Preclassic plates placed lip to lip in conjunction with the construction of the 5C–1st stairway. A second offering, a large bucket with plate lid, was subsequently found in the summit rubble fill of the superstructure of 5C–2nd, again in association with the burial of that building and the construction of 5C–1st.

Structure 5C–1st constitutes the only full revision of a public building identified at Cerros, and it is a limited project compared to the effort built into other pyramids at the site. Structure 5C–1st permitted an extraordinary preservation of the stucco and paint panels of 5C–2nd. Here, almost exactly fifty years after the discovery of E–VII sub, another complete Late Preclassic decorated building was found. A 2.5m-by-2.5m pit through the floor of the front room of the superstructure was carried some 3.6m (or within 50cm of ambient plaza level) into the construction fill of a single episode. Structure 5C–2nd is unequivocally a single-phase building.

Excavation of a T-trench connecting 5C with Structures 4 and 6, across Plaza 5A, showed that 5C is actually the main secondary substructure of a low acropolis similar in design to the larger Structures 3, 4, and 6 (and, incidentally, to the North Acropolis at A.D. 1). Originally, 5C–2nd faced out over a low raised plaza that ended in a broad stairway down toward the south. What lay beyond that stairway is unknown, but the surfacing directly in front of the stairs is a marl plaster on ground level. Ground level, in this case, is the surface of the nucleated village found in the east plaza area in front of Structure 4. Excavation into this deposit revealed the same dense laminations of trash and house floors found in the coastal exposure of Feature 1. It is certain that 5C–2nd was built *de novo* directly on top of a former residential area. Given that this building forms the northern apex of the north-south center line for Cerros throughout its history, it seems likely that it represents the formal foundation of the ceremonial center coeval with, or slightly later than, the plain Structure 2A–Sub 4–1st. Certainly, the stratigraphy of the T-trench shows that 5C–2nd was followed by construction of Structure 6 and then by Structure 4. Structure 5C–1st was probably built in conjunction with the major modifications of Plaza 5A carried out when Structure 4 was erected.

The main north-south center line was embroidered throughout the later Late Preclassic settlement at Cerros (Scarborough et al. 1982). The massive Structure 4 faced east and was balanced by an isolated pyramid-plaza complex, Structure 29, at the southern margin of the community. Structure 29, in turn, is the apex of a triangle formed by two Late Preclassic ball courts.

Structure 29B measures 38m by 44m at the base and 11m in total height. At its summit is a triple transverse building platform group, an architectural design that, as research proceeds, is becoming increasingly evident for the Late Preclassic period. A test pit through the summit of the central building platform showed that it was constructed in a single effort on top of a prepared plaster surface laid down on the secondary substructure that forms the bulk of the pyramid. Penetration of this floor to a total pit depth of just under 4m revealed clean construction fill and no evidence of earlier buildings. Excavation through the one stairway on the main substructure of 29B showed that the plaster flooring extended from the plaza under the stairs. It is possible that this flooring is associated with some deeply buried building; it is equally possible that the technique reflects the policy carried out in the building platform—the laying down of flooring prior to construction of the building.

While only a single stairway was in evidence on 29B, there was a suggestion of an earlier 29B–Sub in an exposure flanking the stairway. Here, the outer masonry wall encased another wall of reasonably good loaf-shaped blocks. While it is possible that this other wall represents an earlier building, the curious absence of an associated stairway indicates the alternative—a particularly well-constructed wall backing the formal outer one. Available data indicate a single major construction episode for 29B with possible minor refurbishment.

The plaza below, 29A, was built in a single construction effort, at least in the immediate vicinity of 29B, where it was plumbed to bedrock. The alleyway between the northern and central building platforms on 29B was full of broken stucco, layers of white marl, pottery disks, smashed pots, and layers of carbon from bonfires—a deposit investigators have come to recognize as part of a termination ritual for buildings (Garber 1981; Cliff 1982; Robertson-Freidel 1980). Radiocarbon determinations on a very large sample yielded a calibrated date of 25 B.C. ± 50 for this event. While many more samples must be run on the Cerros architecture before we can be certain of the brevity of monumental building there, the statistical overlap at one sigma between this ending ritual and the construction of Structure 2A–Sub 4–1st, at the outset of construction of the center, is at least in concert with the available evidence from stratigraphy.

If there is reason to believe that a conjunction exists between the appearance of monumental architecture and monumental art at Cerros, a practical explanation might involve wholesale importation of the "idea" of civilization into this geographically marginal site (see Rathje 1971). Doubt is cast on this "heartland-to-periphery" scenario, however, by preliminary evidence from other Late Preclassic centers—evidence suggesting that they experienced the same conjunction. At Lamanai, Structure N10–43 is a 33m-high Late Preclassic pyramid with mask panels (now ruined) and the triple building platform arrangement found on Structure 29B. Tunneling below this building (Pendergast 1981) shows a single construction effort on top of residential midden, comparable to Structure 5C–2nd at Cerros. To be sure, earlier public platforms are known from Lamanai, but it is not until the Late Preclassic period that large buildings bearing decoration are found. At Tikal, the Chuen-period platforms of the North Acropolis were evidently small and painted plain red, and they carried apron moldings. Sometime after 100 B.C.—probably closer to 50 B.C.—the Acropolis was formally inaugurated with Cauac-phase decorated buildings such as 5D–Sub.1–1st (and perhaps 2nd), 5D–Sub.3–3rd, and 5D–Sub.10–1st (W. R. Coe 1965a). At least in this complex at Tikal, the conjunction found at other sites can be suggested. At Uaxactun, E–VII sub has no precedent at the site; it is built *de novo* over a diminutive altar and residential trash. Before E–VII sub, there were low platforms, as at other sites. Finally, the definitive corroboration for this hypothesis may well come from the site of El Mirador (Matheny 1980) in northeastern Peten, where building complexes that are rivaled in size only by those at Teotihuacan and Cholula are being dated to Late Preclassic times. Structure 34, a thoroughly investigated Late Preclassic pyramid in the El Tigre complex, has monumental polychrome stucco masks flanking an outset stairway below a masonry superstructure. In general appearance, this building resembles 5D–Sub.1–1st at Tikal and 5C–2nd at Cerros. Recent informal reports from the field indicate that this building, too, was laid down on residential midden in a single construction episode. So far, no major architecture at the site has been dated before the Late Preclassic (Robert Sharer, personal communication, 1982).

It should be underscored that we are looking at the invention of the sculptured pyramid, not the initial development of public architecture in the Lowlands, which surely goes back into the Middle or Early Preclassic. The hypothesis is that the advent of this particular artistic medium coincides with an explosive development of central ceremonialism in general.

Some Late Preclassic centers lack the sculptured pyramid. At Komchen, in northern Yucatan, a robust and very dense Late Preclassic community has at its center several massive platform complexes undecorated with painted stucco friezes (Andrews 1981). Other architectural features there—inset stairways and the acropolis format—are shared with Lowland sites elsewhere. The Late Preclassic version of the secondary substructure on Mound 34 at Cuello also lacks sculpted stucco decoration—although it has painted motifs on the stairway (Hammond 1979:fig. 2.8)—and this site is between

Cerros and Lamanai. The significance of these exceptions remains to be established, but it is noteworthy that both Cuello's Mound 34 and Komchen suffered decline and abandonment during the Late Preclassic and Protoclassic periods.

We suspect that the varying degree of participation by centers in regional networks during the Late Preclassic may be comparable to that found during the Classic, when many centers lacked stelae, ball courts, and other accouterments of elite activity. Such variability in no way counters the notion that the invention of the sculptured pyramid was a virtually simultaneous phenomenon over a broad section of the Lowlands. When one considers that more than 130,000m^3 of rock and earth were quarried at Cerros during the first century B.C. (Scarborough 1980) to create the center there, that Structure N10–43 is nearly as large as the grand Classic temples of Tikal and is only one of several possible Late Preclassic monuments in its volume range at Lamanai, and that the Late Preclassic El Tigre and Danta groups at El Mirador dwarf anything built subsequently by the Lowland Maya, the use of the term "revolution" is not out of place.

THE SECOND STAGE OF THE ARGUMENT

The second stage of the argument considers the nature and structure of the art. The decoration occurs primarily on panels flanking stairways; these panels normally feature massive central masks (fig. 2.3). There are reasons to suspect that superior moldings also carried decoration, at least in the case of 5D–Sub.1–1st at Tikal (W. R. Coe 1965a: fig. 4), and that the basal moldings of superstructures were elaborately decorated in some cases, as on the central platform of Structure 29B at Cerros. However, no intact examples of such friezes have yet come to light.

Structure 5C–2nd at Cerros is a handy place to review the earliest expressions of the iconographic constants and variables. It has four masks in central locations, two on lower terraces and two on panels directly attached to the building platform of the superstructure (fig. 2.3). The arrangement is highly symmetrical, and contrasts are intentional, from lower to upper and from east to west. The main features of the decoration framing these masks are found on all the panels. The earplug assemblage consists of a large central flare—either a rounded square or a circle—with a deep central depression, bracketed by knot motifs above and below, which are further bracketed by feather scrolls above and trilobed dependent elements below. Flanking the earplug assemblage are profile zoomorphic heads with upswinging snouts and scrolls and fangs at the mouth area. Framing the sides of the panels are more profile zoomorphic masks, and in top-line panels there are (with the notable exception of the Upper West panel) J-scroll-and-bracket motifs (Joralemon 1976).

The composition on 5C–2nd is complete. Essential elements of it are found on all the existing examples from Late Preclassic buildings in the Lowlands. Beginning at

Cerros Structure 29B, the main masks flank stairways and have versions of the earplug assemblage, which include the bracketing knots and the trilobe depending elements. On Structure 6B, the main mask of the lower east panel is completely obliterated, but enough of the earplug assemblage remains to establish that the flare was bracketed by both knots and twisted bands—an element that will crop up again in later contexts—and the profile mask is underneath the knot/band instead of to the side—another compositional anticipation of later convention.

On Structure N9–56 at Lamanai, the only exposed mask is anthropomorphic and has the earplug assemblage with bracketing knots above and below, with the profile zoomorph situated above the earplug rather than below or to the side—yet another anticipation of later convention. Here the trilobe tassel emanates out of the central depression in the flare rather than depending below it. On 5D–Sub.3–3rd of the North Acropolis at Tikal, enough of the mask is present to show that it has flanking earplug assemblages, including the conventional flare with deep central depression and four bosses, with knots above and below. The central terrace masks on Uaxactun E–VII sub are the exception that proves the rule. Here the earplug assemblages have been suppressed into a maze of amorphous scrolls. The arrangement of the masks on narrow outset balustrades evidently required this modification, for the earplugs are in evidence on the upper-terrace masks. These assemblages are extremely simplified but contain a depending broad scroll, which is also found on the more complete assemblages flanking the mask at Acanceh. The Acanceh mask includes the knots above and below, a feather scroll above the assemblage, and other features (such as the great bifurcated tongue) that tie it to known Late Preclassic examples. Finally, the masks on Structure 34 at El Mirador are particularly large and have unusual earplug assemblages. Here, the flare is a great jaguar paw with three claws, but the knots above and below are in place; the feather/scroll motif above the knot, seen at Cerros, is here; and there are depending elements below. In terms of architectural placement of the panels, focus of composition on monumental masks, symmetry, and the conventional use of complex motifs such as the earplug assemblage, the present corpus expresses a simple and focused repertoire.

Within this repertoire, two major compositions can be discerned. The first, registered on 5C–2nd at Cerros and on E–VII sub at Uaxactun, is exhibited primarily through contrasts in the vertical dimension. On 5C–2nd, the upper panels carry masks with prominent curling lips below anthropomorphic snouts, while the lower-panel main masks have stepped alveolar bars below the snouts, that is, blunt snouts instead of long lips. Moreover, the lower main masks at Cerros are actually two full-face masks blended, one on top of the other. The lowermost masks merge into the ground with only the upper faces shown, but they are clearly long-lipped, like the upper-panel masks. The vertical sequence, from bottom to top, is long-lipped, blunt-snouted, long-lipped. This contrast is repeated on both sides of the stairway on 5C–2nd. On E–VII sub, three main masks in the vertical dimension again contain the primary contrasts. The masks are on separate terraces, and the lower two are not joined. The lowermost masks are zoomorphs. The restoration drawing (Ricketson and Ricketson 1937: fig. 39) of the front view depicts nostrils flanking a nose plaque. Examination of the photographs, however, shows this interpretation to be problematic (ibid.: pl. 31c); it is just as reasonable to suppose a continuous surface from the snout area into the "nostril." In fact, considering the profile view of the mask, it seems likely that the artisans did not intend to display nostrils (ibid.: fig. 39) but rather a split representation of an upturned snout designed to accommodate the square bulk of the balustrade. On 5C–2nd, split representation appears in the helmets of the lower main masks and, more explicitly, in the top-line profile zoomorphs on the upper west panel. A good Late Preclassic example of a profile zoomorph with upturned snout occurs on Structure 6B at Cerros (Freidel, Robertson, and Cliff 1982:16). We identify the lowermost zoomorphs on E–VII sub as long-nosed entities.

The middle zone on E–VII sub clearly carries blunt-snouted polymorphs. Although variety is displayed, most of them carry some version of a stepped bucktooth or *tau*-tooth, an important diagnostic trait. The upper-zone masks are clearly long-lipped polymorphs. Indeed, given the presence of explicit human shoulders on Mask 18, it is possible to suggest that the other main contrast of the Late Preclassic—anthropomorph/zoomorph—is shown here. Certainly, the essential blunt-snout/long-lip contrast can be identified on both 5C–2nd and E–VII sub in the same order, in the same dimension. We argue that the two most complete Late Preclassic sculptured buildings carry essentially the same composition.

These buildings, separated by fifty years of work and several hundred miles, also stand at the opposite edges of the known variability range, for 5C–2nd embodies virtually the total known repertoire of motifs for the age and is formal, even conservative, in execution, while E–VII sub now seems daring, if parochial, showing architectural flair in its balustrades and bold improvisation of the main program in the suppression of the earplug assemblages. Forthcoming Late Preclassic panels registering this composition will probably fall somewhere between these two examples in the use of the motifs.

There are hints that this composition of blunt-snouted and long-lipped polymorphs represents the initial and primary Late Preclassic program. Both 5C–2nd and E–VII sub certainly are *de novo* innovations at their respective sites. Even more telling is the fact that E–VII sub is virtually unpainted, and 5C–2nd represents a definitely primitive polychrome tradition when compared with the decorated panels that follow stratigraphically at Cerros. The shift from simple to complex polychrome is accomplished in the span of a single major renovation of 5C–2nd—a brief period, even when taking into account the fact that the original façade was refurbished at least once and probably several times.

Unfortunately, despite evidence that all later buildings at Cerros displayed panels with great masks painted in elaborate polychrome, we were able to discover only one comprehensible composition from this later development: Structure 29B. The preserved northern panel of its central platform shows a realistic jaguar marked by a great J-scroll-and-bracket, bifurcated tongue, skeletal mandibular process, and flame brows. Out of the fontanel emerges a snarling anthropomorph with a clearly defined lower lip and contiguous mouth area replacing the two separated inset tooth panels seen on earlier polymorphs. The nose area, critical to identification, is unfortunately badly damaged here and on the other masks on 29B, but an example of the same composition from Tikal shows the nose to be unequivocally human. Moreover, the image has inset, incurling fangs. This element is diagnostic of most main masks, both zoomorphs and anthropomorphs, of the later, full-polychrome part of the Late Preclassic. Finally, another of the anthropomorphs on 29B has an armature for a *tau*-tooth, previously seen at E–VII sub and subsequently associated strongly with anthropomorphic images.

The vertical contrast between anthropomorph and zoomorph is found on the other preserved panels of 29B. Both flanking platforms carried panels, but only the northern panels are preserved sufficiently to discern detail. Here, the contrast is between a lower, long-lipped zoomorph and an upper anthropomorph. The long-lip/blunt-snout contrast is maintained, but in the horizontal dimension. Armature remains for the other masks show that the southern panels carried long-lipped lower masks, while the central platform carried blunt-snouted lower masks. Unlike 5C–2nd and E–VII sub, 29B displays contrasts in the main masks in both the vertical and horizontal dimensions. We suspect that, if only one set of panels exists for a building, as in the case of Structure 34 at El Mirador, then primary contrast will be in the horizontal dimension; otherwise, vertical contrast appears to be primary and horizontal contrast secondary.

This is a working hypothesis with the sample in hand. The badly damaged remains of a probably complete composition have been excavated on El Mirador Structure 34 (Hansen 1984). Our reading of these problematic masks suggests that the eastern main mask shows a blunt-snouted jaguar with skeletal lower mandible and a possibly bifurcated tongue below. The west panel shows a probable anthropomorph with slightly inset bands around the mouth area, like those on the clear anthropomorphs of Kohunlich (fig. 2.13b). We would view these panels as displaying the same contrast as that seen on the central platform of 29B, but in the horizontal dimension. One bit of supporting evidence for this reading is the remarkable variation on earplug assemblages here: the flares are rendered as giant jaguar paws. Qualification of the details of earplug assemblages was no doubt always significant in the Late Preclassic. Here, the statement seems to be that, despite separation by the stairway, the two masks pertain to the same entity, as signaled by physical juxtaposition at Cerros.

The preservation of the Late Preclassic decoration on Structure N9–56 at Lamanai is as good or better than that seen on 5C–2nd and E–VII sub. When further exposed, it will provide the first detailed view of this kind of composition. The architectural plan is the triple building platform seen on 29B at Cerros and N10–43 at Lamanai (Pendergast 1981). Like 29B, N9–56 faces west. The only uncovered panel is on the lower terrace on the north side of the central platform. Only the back panel of the upper mask remains. Probing indicates the presence of two masks on the north as well. The excavated mask is clearly anthropomorphic. There is evidence that the battered nose is human, and not the humanoid snout with blunt or long lip found on polymorphs. The *tau*-tooth is displayed in its preserved base. The lower lip is identical to those on the anthropomorphs of 29B (fig. 2.6), and the image carries inset, incurling fangs. The eyes—goggles with heavy, platelike brows—are a bulging version of the L-shaped or inset-panel squint eyes of the earlier polymorphs on the upper east main mask of 5C–2nd. The L-shaped brow plate is an enlarged version of the squint eye seen, for example, on the upper west main mask of 5C–2nd. The lower east main mask of 5C–2nd initially had an inset panel, and the eye was later modified to a squint. The full-squint form persists into later compositions, as, for example, on the polymorphic mask of Kohunlich. The flame brow, prominent on the polymorphs of 5C–2nd and elsewhere, is reduced at Lamanai to a strip above the brow plate. Technically, this is a squint-eyed image, but the relative proportions of the elements of the motif have been modified to give a more human appearance. Finally, the god carries the cruller characteristic of the Classic-period Jaguar God of Number Seven.

This last trait is the only clue now available which suggests that the total composition will deal with the anthropomorph/jaguar contrast. We predict, however, that, if there is a lower decorated panel, it will carry either a replication of the known panel—providing no significant contrast, as in the case of Kohunlich—or it will carry realistic jaguar masks. We further predict that the flanking platform panels will pertain to the long-lipped zoomorph/anthropomorph theme seen on Structure 29B. Concern with the human/animal contrast, or the extrication of the human from the polymorph by expression of the whole in human and animal fragments, no doubt exists as a discernible moment in Late Preclassic sculptural development. Further possible examples of this concern include the badly damaged Structures 5D–Sub.1–1st and 5D–Sub.3–3rd at Tikal; Structure 6B at Cerros (where, we suspect, the jaguar was above and the anthropomorph below); and Structure N10–43 at Lamanai (where only a single long-lipped lower mask is preserved on the western building platform).

The façade on the undated pyramid at Kohunlich appears to provide a nearly contemporary development from the anthropomorph/zoomorph contrast. The now-virtually-human masks lack the inset, incurling fangs; the upper lip is as clearly defined as the lower and is distinct from the nose; and the L-shaped brow plate is suppressed into a craggy bar, so that the eyes are less gogglelike and more human. We suggest that a concomitant of this humanizing of the main mask is a depersonalizing of the lower (and, in this instance, upper) zoomorph into a conventional place marker (strap and helmet). Although, as a mural at Río Azul shows (Adams 1986; I. Graham 1986), both the less-human anthropomorph and the more-personalized zoomorph persist well into the Early Classic period, the overall trend is to facilitate direct substitution of the entity portrayed on the main masks with portraits of real people, as in the case of the Early Classic façade of Lamanai N9–56 (Pendergast 1981) and the façade at the Museo Nacional de Antropología in Mexico City.

The second major composition of the Late Preclassic—the anthropomorph/zoomorph contrast—seems to derive logically and formally from the first: (1) the principle of compounding or stacking is exhibited in both, (2) the formal features of the polymorphs are detectably distorted to form both the anthropomorph and the zoomorph, and (3) the framing elements remain virtually constant. The latter remain intact into the Early Classic, and increasing humanization flows smoothly to the point of portraiture—accompanied by reiterations of the earlier forms. Blunt-snout/long-lip and anthropomorph/zoomorph currently account for all known Late Preclassic compositions on pyramids.

We have neglected superstructures and tombs. Tikal Structure 5D–Sub.10–1st has murals on a little shrine over an elite burial (W. R. Coe 1965b:18). Its figures may or may not show the entities depicted on substructures—the faces are destroyed. Large chunks of plaster frieze were found deliberately shattered on 29B at Cerros. In addition to elements such as earplug flares and knots, there were hands and other fragments suggesting whole-figure representation. Structure 5D–Sub.1–1st evidently also carried superior molding of elaborate design. We do not know how these areas of decoration will fit into the larger scheme, but there is no reason why a possible predilection for whole-figure representation would focus on entities other than those presented as heads on pyramids. Moreover, substructures are clearly the main medium in Late Preclassic times. In brief, the conjunction of major monumental construction with public art occurs suddenly everywhere, and the art shows the coherence for which the Lowland Classic corpus has been justly noteworthy.

How and why does this sudden transformation come about? How does a society go from little handmade figurines and scrolled tubes to massive masks, from small platforms with apron moldings to the El Tigre complex at El Mirador (Hansen 1984), 55m high and 180m a side, perhaps the largest building complex in the New World in its time? This is a problem of no mean proportions in tracing the evolution of complex society. Let us eliminate invasion and conquest. There is clear evidence of continuity in ceramics, lithics, house-construction techniques, and basic material culture from Middle Preclassic to Late Preclassic, and from early Late Preclassic to late Late Preclassic (Robertson-Freidel 1980). Settlement patterns appear to undergo important changes (Cliff 1982) but as part of the redefinition of population concentrations as large-scale public centers. Population movement in and out of the Lowlands was undoubtedly routine throughout prehistory; no mass migrations can be identified in this period.

Rapid diffusion of public art from adjacent areas by means of interloping artisans seems unlikely. The surrounding high cultures favored stone as a medium. The peninsula is a stone slab, and Classic Lowland sculptors stand among the best in the Pre-Columbian world. Outsiders would have used this medium rather than inventing a new one, such as the sculptured pyramid. This is not to deny strong correspondences between motifs on Lowland panels and on carved stone in the Highlands of the Late Preclassic. The Lowlanders did call upon Highland artisans, and probably Highlanders called upon Lowlanders. The correspondences are primarily in the arts of a single period, although compositional themes can be traced back into Olmec times. Scenes with long-lipped creatures carrying disembodied blunt-snouted heads are found at Izapa and perhaps at Kaminaljuyu (see Parsons, this volume). The J-scroll-and-bracket motif is the standard top-line design (Joralemon 1976; Norman 1976; Quirarte 1973); the two-headed-serpent sky frame is used in both Highlands and Lowlands. Indeed, such contrasts as that of the blunt-snout/long-lip can be traced back through Epi-Olmec times at Tzutzuculi (McDonald 1977) into the Olmec corpus (Agrinier 1960).

Whatever the Highlanders and other peripheral complex societies may have invented or accomplished, however, is so clearly reformulated in the Lowland panels that the role of the related styles cannot be regarded as determinative. Diffusion will not explain the Lowland Maya jump into civilization. The sudden appearance of high art in the Lowlands marks fundamental innovation, rearrangement, and indigenous articulation.

Unable to find explanation outside, we must seek it inside. We must look to the evolving conditions in Maya society that would suppress the use of complex imagery that had endured through a thousand years of contact with Olmec and related peoples; then we must look to precipitating circumstances of social change that encouraged the sudden embrace of and total commitment to that principle of public art that had been under an anathema for generations. The signal of this "jump" is the deployment of a complex regional symbol system. This phenomenon cannot be regarded simply as an objective symptom of social change; it is the active ingredient of that change. To arrive at an explanation, we must get inside the Lowland Maya social body and, further, inside the cultural mind, for the essence of civilized life is the self-reflecting, deliberate manipulation of social conditions by central people in central institutions acting upon central and broadly shared cultural maxims. Clearly, the prime function of Lowland Maya art is to display and reinforce new maxims which, all evidence suggests, a de facto elite invented in response to an overwhelming social demand for them. We believe that the maxims expressed in Lowland Late Preclassic art are deducible through the investigation of structural continuities that go forward into the Classic corpus. There are significant disjunctions, but these are comprehensible solutions to problems of meaning engendered by the original cosmogram and its descendants; these breaks are neither accidental nor amnesic.

The decoding of Maya art as cultural reality will have two fundamental effects: (1) it will allow methodological synergy between the disciplines of art history and archaeology, and (2) it will lead to the formulation of a viable evolutionary framework for this civilization, a framework with general implications for the evolution of complex society.

The Innovation and Evolution of the Symbol System

J. Eric Thompson (1944b) demonstrated a principle of substitution (used also by earlier authors) by which structurally equivalent signs can be identified in parallel constructions in the Maya writing system. He demonstrated that T25 and T205 function as structurally equivalent signs in the glyphs now known to name the Palenque ruler Pacal; the substitution of these two glyphs is based on their shared phonetic value *ca*. Many more phonetic and semantic equivalences that confirm Thompson's method have been identified. This principle can be applied to the visual symbol system used by the Lowland Maya. By demonstrating that images—sharing in whole or in part a complex of diagnostic traits not found with other images—occur in structurally identical positions, it is possible to posit structural equivalences between Late Preclassic and Classic icons and iconographic complexes. Since the function and meaning of the Classic analogues are at least partially understood, the identifications and semantic domains of iconographic complexes can be discussed in terms of continuities from, derivations of, or substitutions for the iconography of the Late Preclassic period.

Using comparative analysis, we will attempt to demonstrate that a large proportion of the symbol system used by the Southern Lowland Maya in the Classic period to legitimize the position of rulers first appeared on permanent public monuments during the Late Preclassic. We do not wish to imply that the Late Preclassic Maya invented in isolation the system that became central to the later period, for it is clear from archaeological and visual evidence that the Maya were interacting with Highland Guatemalan societies, with whom they shared symbols (the serpent-sky frame), media (the stela format?), and perhaps the Long Count calendar system. We are implying, however, that the format of presentation—the pyramidal façade and stucco sculpture—and the way that images were combined and used as tools to reinforce social change and elite power structure were an indigenous product of the inventiveness of the Lowland Maya.

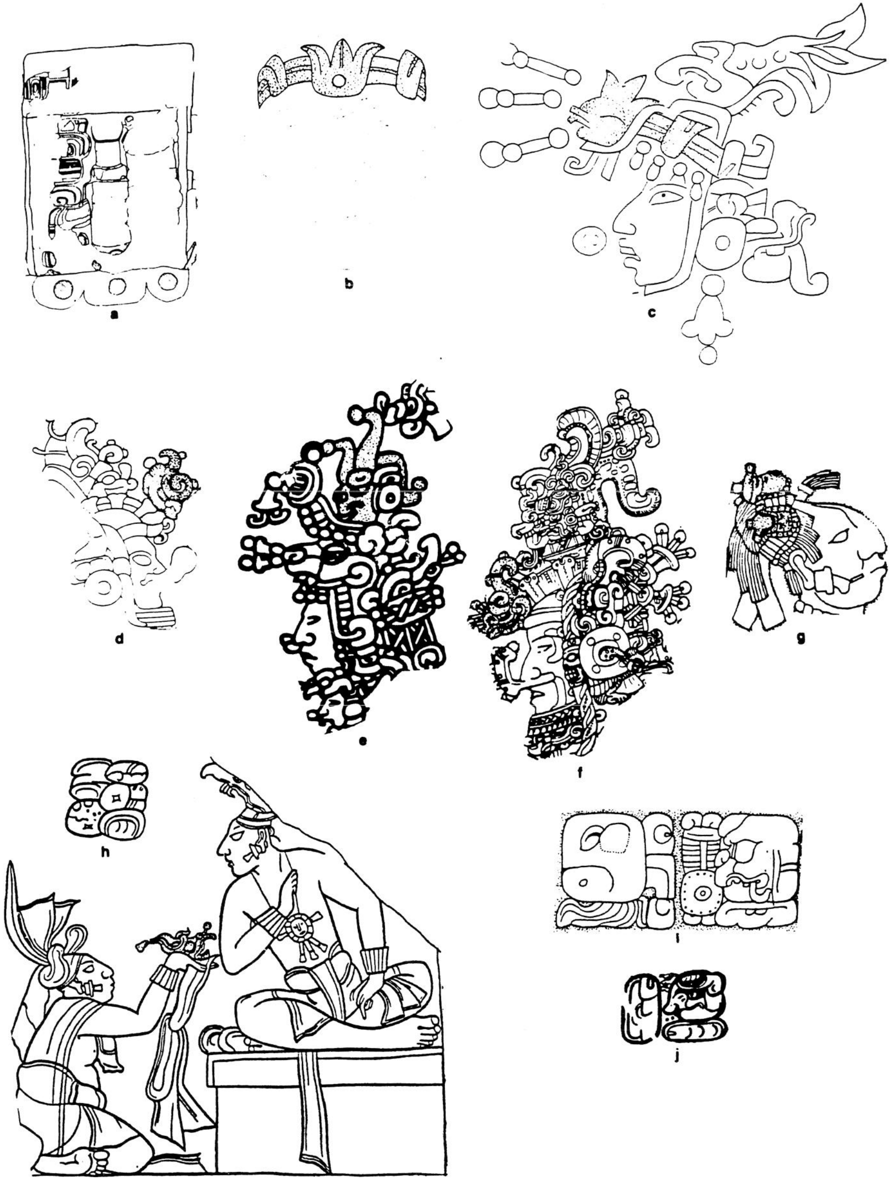
THE JESTER GOD

The identification of the Jester God (fig. 2.1)—named for the shape of the top of its head—as an important icon was made in an analysis of the accession iconography at Palenque, where, on the Tablets of the Cross and Foliated Cross, a full-figure Jester God is presented to a central icon by the acceding ruler, Chan-Bahlum (Schele 1974:49). The god is attached to the forehead of the ruler on Tikal Stela 29, the earliest dated Classic monument, and, throughout the Classic period, it was closely associated with royal portraiture, remaining one of the most frequently repeated components of royal headgear.

More recently, M. D. Coe (1978:58,70) has recognized that many of the forehead "Zip Monsters" worn by the Young Lords in pottery scenes, are, in fact, elongated Jester Gods. The Jester God can, moreover, be associated directly with the rite of accession. A headband with an attached Jester God is offered to a seated lord on Bonampak Sculpture Panel 1 (fig. 2.1h), where the event recorded is "he was seated on a jaguar throne as lord of the succession." To wear the Jester God is to be the ruler.

This association with accession is reinforced by the identification of the written version of the Jester God as T1030o. Many of the "seating" expressions on the east panel of the Temple of the Inscriptions at Palenque use the Jester God to record the office taken upon accession (fig. 2.1i). This function of the Jester God may be explained by its associations with the human and vulture versions of *ahau*, which are usually accompanied by a semantic determinative to insure a correct interpretation. In most examples, the semantic determinative is a head scarf (probably derived from the band as shown on the Bonampak panel) with an attached *ahau* in its normal T533 form. There are, however, examples of *ahau* from Quirigua, Yaxchilan, and Palenque, in which the T533 *ahau* is replaced by a Jester God (fig. 2.1j). From the beginning of the Classic period, in all occurrences and in both iconographic and epigraphic forms, the Jester God is a mark of rulers.

The function as "crown" and the diagnostic features of the Jester God were formulated long before the earliest Classic stela. Three examples of this headband are known on Late Preclassic monuments. One is found on the zoomorphic upper heads on Structure 5C–2nd at Cerros (fig. 2.1a); although both versions are badly damaged, enough detail remains to suggest that the headband had a large central element and two smaller bifurcated shapes. Burial 85 at Tikal (fig. 2.1b), which, like the Cerros structure, is dated to the last half century B.C. (Coggins 1975:79), yielded a single male skeleton "seated in a bowl, wrapped in a cinnabar-impregnated textile to which a fuchsite (green stone) mask had apparently been attached in symbolic replacement of the missing skull" (ibid.:80). The headband on the Tikal human mask consists of two bifur-

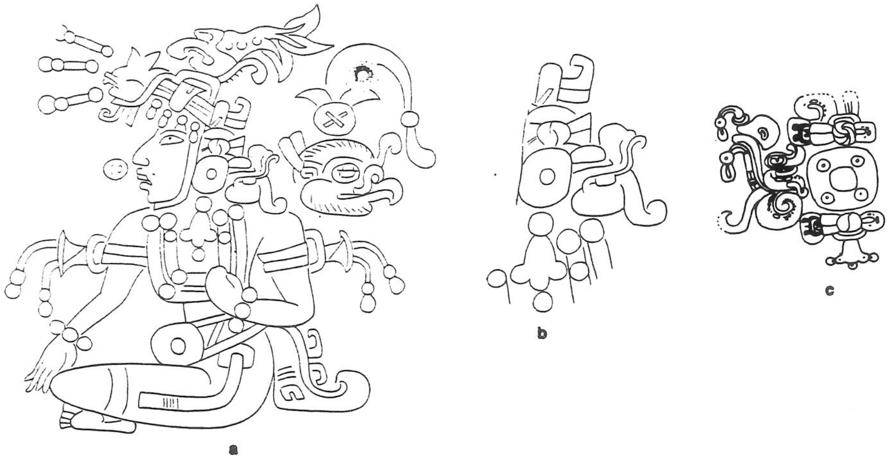


2.1 The Jester God. a. Upper head, Cerros Structure 5C–2nd. (Redrawn by Linda Schele after Freidel 1981.) b. Greenstone mask, Tikal Burial 85. c. Dumbarton Oaks jade pectoral. (b. and c., redrawn by Linda Schele after M. D. Coe 1966.) d. Tikal Stela 29. (Redrawn by Linda Schele after W. R. Coe, in Jones and Satterthwaite 1982. The University Museum, University of Pennsylvania.) e. Leiden Plaque. (Drawing by Linda Schele.) f. Tikal Stela 31. (Redrawn by Linda Schele after W. R. Coe 1967.) g. Palenque Oval Palace Tablet, left figure. h. Bonampak Sculpture Panel 1, verb for "seating on a jaguar throne" and the scene of accession. i. Palenque Temple of Inscriptions, east panel, "seating as *ahau*" (Jester God). j. *Ahau* written with Jester God scarf. (g.–j., drawings by Linda Schele.)

cated shapes flanking a central trifurcated element; it is reminiscent of the Cerros headbands.

M. D. Coe (1966:14) recognized that the headband on the Burial 85 mask also occurs in profile view on a reused Olmec pectoral in the Dumbarton Oaks Collection (figs. 2.1c, 2.2a). In this example, however, the trifurcated central element appears in personified form with zoomorphic features attached to it. The dating of this example can be refined by comparing it with the iconography of the ear-flare assemblages on 5C–2nd at Cerros (fig. 2.2c); the Dumbarton Oaks figure wears an identical ear-flare assemblage (fig. 2.2b). In later versions of the assemblage—for example, the Kohunlich mask (fig. 2.13b)—the flanking grotesque is represented only by the tip of the snout and a nostril, a formulation that remained constant throughout the Classic period. The presence of the unreduced form of the Cerros grotesques on the Dumbarton Oaks jade dates it as roughly contemporary with the Cerros façade, ca. 50 B.C.

In two of the three examples, the headband is associated with historical rulers, and in the third with a supernatural being on an important public monument designed as a stage for major ritual activity. A comparison of the Jester God on Tikal Stelae 29 (fig. 2.1d) and 31 (fig. 2.1f) and on the Leiden Plaque (fig. 2.1e) shows enough similarity in form to back the suggestion that the Late Preclassic headband is the prototype of the Classic Jester God headband. The Classic versions lack the two flanking shapes of the earlier bands, but the concept of a three-part band seems to have survived at least as a remembered form. On the Oval Palace Tablet at Palenque (fig. 2.1g), a site noted for extensive use of archaic forms in its dynastic iconography, the Jester God appears in

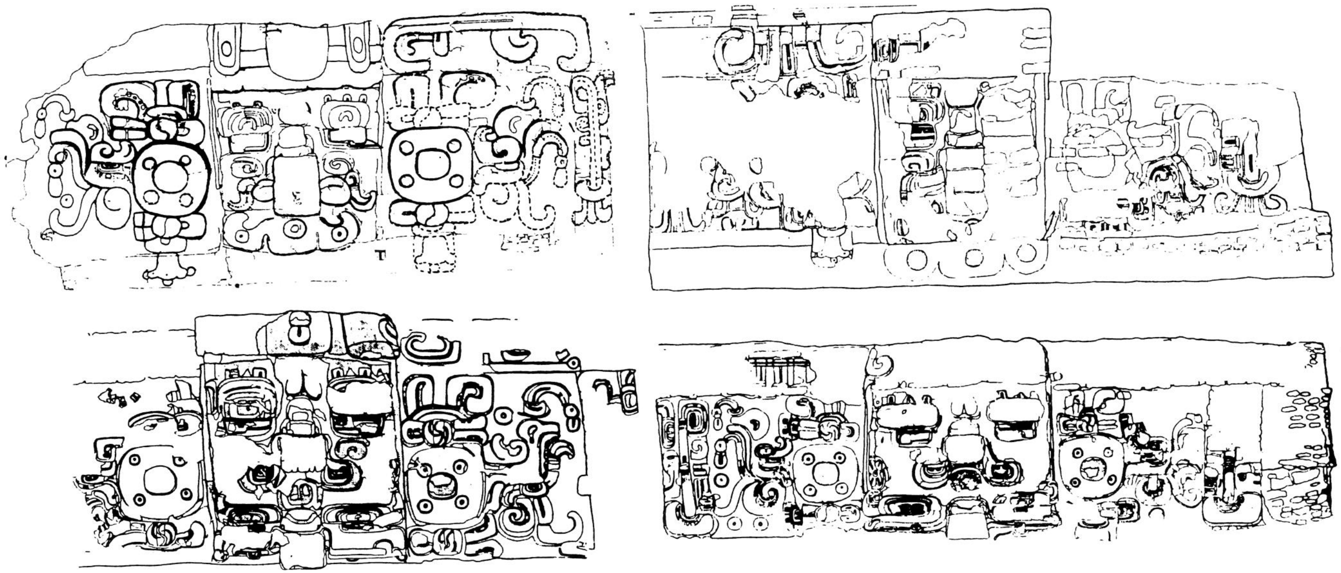


2.2 a. Maya drawing from reused Olmec jade in the Dumbarton Oaks collection. (After M. D. Coe 1966.) b. Detail of ear-flare assemblage from the Dumbarton Oaks pectoral. (After M. D. Coe 1966.) c. Ear-flare assemblage from Cerros Structure 5C–2nd. (Redrawn by Linda Schele after Freidel 1981.)

he anthropomorphic form characteristic of many Early Classic versions and is re-
eated in the triadic form of the Late Preclassic headband. The Jester God headband
egan as the "crown" of Late Preclassic lineage heads, and as a mark of the supernat-
ral on the upper façades of Structure 5C–2nd at Cerros.

THE CERROS FAÇADES AND ROYAL COSTUME

The façade composition of 5C–2nd at Cerros is the prototype of one of the most widespread and important elements of royal costume, the flanged headdress. The Cerros façades (fig. 2.3) feature blunt-snouted and long-snouted zoomorphs flanked by ear-flare assemblages, which, minus the outer zoomorphs and with some variation, occur also on the façade compositions of Structure 29B at Cerros, in the Late Preclassic façade compositions of 5D–Sub.3–3rd and the Lost World Pyramid Group at Tikal, in the compositions of N9–56 and other contemporary façades at Lamanai, and on Structure 34 at El Mirador, where the central disk is placed within a jaguar paw. At Kohunlich (fig. 2.13b), the same ear-flare assemblage reappears, but with flanking anthropomorphic heads; the zoomorphic heads prominent on other Late Preclassic façades function at Kohunlich as a component of the headdress. In addition, the knots found in all Late Preclassic compositions are replaced at Kohunlich by mat signs personified by



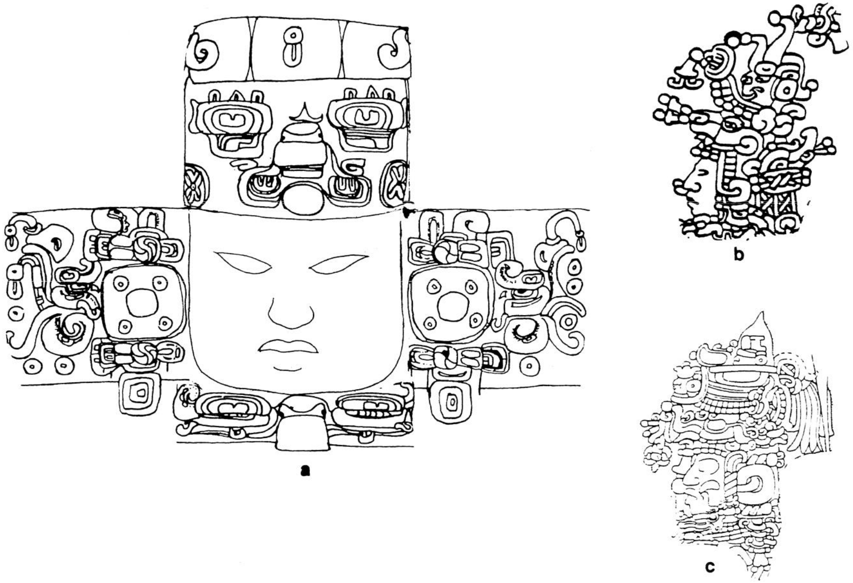
2.3 Drawings, with some reconstruction, of the masks from Cerros Structure 5C–2nd. (Redrawn by Linda Schele after Freidel 1981.)

the long-muzzled heads attached to them, and the flanking zoomorphs shown on the Cerros façade and on the Dumbarton Oaks pectoral discussed earlier are reduced at Kahunlich to isolated muzzle and nostril motifs. This reduced form of the flanking grotesques was retained throughout the Classic period. To our knowledge, the archaeological dating of the Kohunlich building has not been published, but the presence of a serpent-sky frame similar in detail to Cerros 5C–2nd suggests a Late Preclassic or at least transitional date.

The complex of elements seen in the Kohunlich façade, minus the serpent frame, is retained as featured iconography throughout the Classic period. In architecture, it is found on the Museo Nacional façade, on looted façades from El Zotz,' in whole or in part on Early Classic masks in the North Acropolis at Tikal, on N9–56 at Lamanai, and on the north façade of the Palace at Palenque. Its most important occurrences, however, are in non-architectural contexts, for, if the zoomorphic head of the Cerros façade is raised and a human portrait put in its place, the result is the standard headgear of Classic rulers (fig. 2.4a).

The earliest appearance of this headdress in the Classic period is that on the Leiden Plaque (fig. 2.4b), which has a jaguar as the zoomorph and a new element—the flower headband—that became an optional part of the complex during the Classic period. The use of this headdress on Stela 2 at Tikal (fig. 2.4c) reveals the full Classic context and the Late Preclassic relationship. The ruler wears the headdress, and, as on the Leiden Plaque, the head of the human ruler has been placed in the central position held by zoomorphic and anthropomorphic supernaturals in the Late Preclassic complex. The supernatural has been elevated to a position above the ruler's head, as if the historical ruler is emerging from its mouth; this arrangement implies identification of the historical with the supernatural. The addition of new elements to the complex offers further enlightenment. The main zoomorph on Stela 2 is the Quadripartite Monster, which usually occurs as the rear head of the Celestial Monster. The headdress has a personified wing (usually called a serpent wing) and feathers at the rear, and the muzzle of the zoomorph elongates into the neck of a water bird grasping a fish. This bird becomes the Palenque Emblem Glyph bird in the Late Classic. Nicholas Hellmuth (personal communication, 1982) has suggested that the entire headdress should be considered in the form of a bird; we agree and suggest further that in the Classic period the typical arrangement of feathers in flanking and top groups corresponds to the wings and tail of this bird form.

The Stela 2 headdress is part of yet another important complex—the incensario and cache-vessel iconography prominent throughout the Classic period. In the Early Classic, this theme occurred on large cylindrical vessels, which may have functioned as censers and/or cache vessels. These typically have portraits of one or two personages wearing the flanged headdress; they may be rendered with incised or appliqué relief. Often, one of the portraits is that of a historical ruler; in most cases, this portrait is



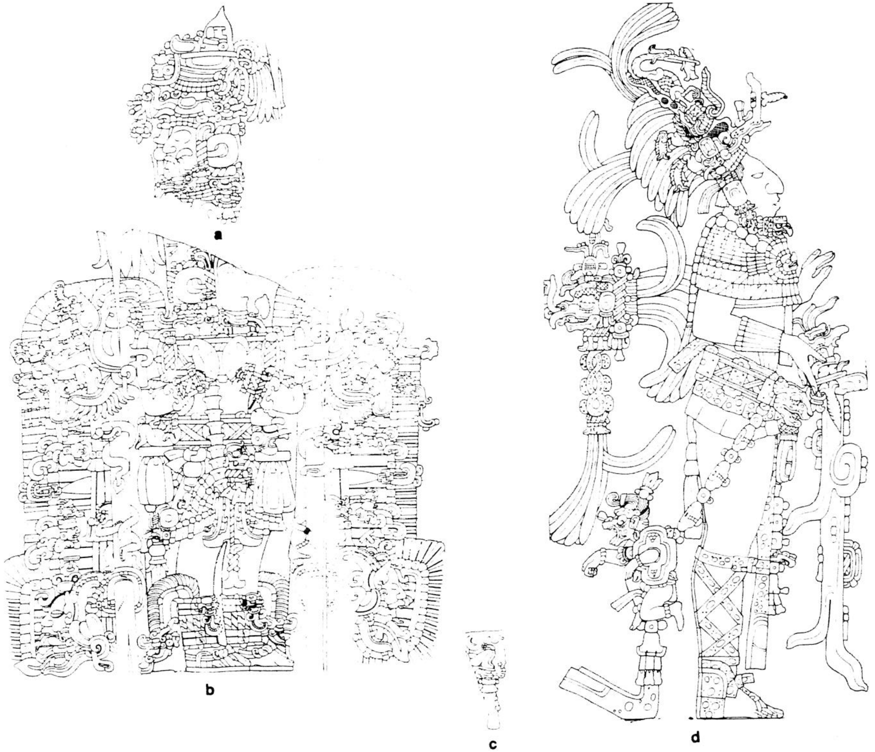
2.4 The royal headdress. a. Cerros Structure 5C–2nd. b. Leiden Plaque. (a. and b., drawings by Linda Schele.) c. Tikal Stela 2. (After drawing by W. R. Coe, in Jones and Satterthwaite 1982.)

accompanied by one of a series of supernaturals, which, in the majority of examples, can be identified as the Early Classic version of the god known as GI of the Palenque Triad. In many examples, GI wears the flanged headdress with the Quadripartite Monster and bird of Tikal Stela 2. Pre–9.2.0.0.0 stelae at Tikal (Stelae 4, 32, and 36 excepted) show the ruler's head in place of that of GI. Again, the identification of the ruler with or as GI is implied. The two monuments within this group that lack the flanged headdress—Stelae 29 and 31—treat the head and headgear of the ruler as the personification of the Tikal Emblem Glyph (Schele 1985a).

This iconography continues into the Late Classic period in two forms: royal portraiture on stelae and the incensario complex at Palenque. The flanged headdress is the dominant form of royal headgear on stelae at Copan, Quirigua, and Caracol. At Palenque, it occurs in two important contexts. First, the Early Classic cache-vessel complex is closely related to Palenque's incensario stands—objects constructed of clay or very fine limestone, which functioned as stands to hold conical censers. The clay versions are found in three contexts: discarded at the rear of temples, cached in the terraces of temple substructures, and placed in regional caves. Although a few very late, aberrant forms are known, the vast majority of incensario stands feature the head of the cruller-eyed Jaguar God of Number Seven in anthropomorphic, fleshed zoomorphic, and skeletal zoomorphic forms. The stone stands, when found in context, were cached under the floors of temples, including the Temples of Inscriptions, Cross, Foliated Cross, XVIII, and IV of the North Group. In all cases, the featured heads of the stone stands are human, while only a few of the clay stands feature historical individuals; these exceptions offer a clue to the meaning of the substitution. The only clay stands with human heads that have known archaeological contexts are those found cached in Temple XIV, a building planned for posthumous construction by Kan-Xul as a means of ritually sealing or "killing" Chan-Bahlum's architectural group (Schele, this volume). Furthermore, all whole stone stands were ritually killed by having all or parts of the faces knocked off. One stone incensario from the Temple of the Foliated Cross was killed by having its nose removed and its left eye obliterated—a method similar to that used on the lower heads of Cerros 5C–2nd. Thus, the human versions of this complex at Palenque either were ritually killed before caching or are found in posthumous contexts—a pattern that again suggests the substitution of the historical person for the supernatural, or an identity between them. The dominance of GI in the Early Classic and of the cruller-eyed Jaguar God in the Late Classic is not yet understood.

The second context for the flanged headdress at Palenque is related to Tikal Stelae 1 and 2 (fig. 2.5a–c). Prior to 9.2.0.0.0 at Tikal, and in the Early Classic at many other sites, this headdress appears consistently with a standard costume that includes a cape; high-backed sandals; a kilt or loincloth; a hand-held object, such as the bicephalic serpent bar; a staff; an effigy god; and a belt that usually has the cruller-eyed Jaguar God attached at the front and a chain with a hanging god at the side. At Tikal this costume occurs on Stelae 1, 2, 18, 29, 31, and 35, and on a newly discovered stela dated 8.17.0.0.0; it may well have been present on the Late Preclassic stone carving MT. 69. It appears on Early Classic monuments at Uolantun, El Zapote, Yaxha, Uaxactun, and Xultun, and in the Late Classic at Caracol and Tonina. The most significant occurrence is in the Cross Group at Palenque.

The first two Late Classic rulers at Palenque—Pacal and Chan-Bahlum—were in a position unusual for rulers of that period: they were leaders of an emerging economic and political power that was without a notable Early Classic history. As Maya, they could draw upon the body of myth and religion and the symbol system evolved during the Early Classic, but they did not have a local tradition that they could build on or, alternatively, that limited the expression of both their charter as community rulers and the legitimacy of their lineage as the recipient of supernatural sanction. Architecture during the reigns of both men was dedicated to the dramatic, public establishment of this charter; their successors did not have to repeat it. The strategy employed by Chan-Bahlum (Schele 1974, 1976) is particularly relevant to the present discussion. He divided the iconography of accession into three units housed in three temples placed on



2.5 The royal costume. a. Tikal Stela 2, head. (Redrawn by Linda Schele after W. R. Coe, in Jones and Satterthwaite 1982.) b. Tikal Stela 1. (Redrawn by Linda Schele after W. R. Coe 1967.) c. Tikal Stela 2, hanging supernatural. d. West panel from the Temple of the Cross, Palenque. (c. and d., drawings by Linda Schele.)

the northern, eastern, and western sides of a plaza; this triadic arrangement of buildings appears to emulate the triadic arrangement characteristic of Late Preclassic architecture.

Each temple was associated with one god of the Palenque Triad; his birth was recorded on the left half of the interior inscription, while the right half recorded the following historical events of particular importance.

1. The Temple of the Cross records the births before 4 Ahau 8 Cumku of the mother (on 12.9.13.4.0 8 Ahau 18 Zec) and the father (on 12.19.11.13.0 1 Ahau 18 Zotz') of the Palenque Triad, as well as that of GI (on 1.18.5.3.2 9 Ik 15 Ceh). The historical information includes the births

and accessions of all Palenque rulers up to and including the ancestor for whom Chan-Bahlum was named. The implication is that, like the Triad, the Palenque lineage is descended from the First Couple and is, therefore, divine.

2. The Temple of the Foliated Cross records the birth of GII (on 1.18.5.4.0 1 Ahau 13 Mac) and the accession of Chan-Bahlum.
3. The Temple of the Sun records the birth of GIII (on 1.18.5.3.6 13 Cimi 19 Ceh) and the heir designation of Chan-Bahlum.

The pictorial compositions reinforcing the written information in these temples utilize two surfaces—the rear inner and front outer walls of the inner sanctuary. On the rear wall, Chan-Bahlum and his deceased father flank an icon specifying the ritual and mythical context of each temple. Here Chan-Bahlum is shown minimally dressed, with few marks of rank and none of office, except for the effigy gods he holds (the Jester God and God K). On the outer panels, Chan-Bahlum is shown in the full regalia of the ruler, with at least three different costume assemblages represented. The assemblage on the west panel of the Temple of the Cross (fig. 2.5d) and the south panel of the Foliated Cross is particularly important, since this costume is the same as the Early Classic ''uniform'' on Tikal Stelae 1 and 2.

The Quadripartite Monster of the Tikal headdress has the shell/stingray-spine/crossed-bands symbol turned 90 degrees to the plane of the face so that it is fully visible to the viewer (fig. 2.5a). In the Palenque headdress, the stingray spine and crossed bands are shown but not the shell, because it is on the other side. The bird of the Tikal headdress stands atop the Palenque headdress; at Palenque, it has a turtle-shell body, and the Tikal serpent-wing motif appears at Palenque with the addition of ''fish-eating-waterlily'' symbols. The ear-flange assemblages and zoomorphic chin straps on both monuments are equivalent, and both rulers wear backracks and formal sandals. The belts are perhaps the most diagnostic feature of the costume. In all three Early Classic examples, the cruller-eyed Jaguar God is mounted below the front of the belt, head-celt assemblages are mounted on the sides, and the belt is marked with crossed bands. The Palenque belt has a Waterlily Jaguar plus mat and celts and the same crossed bands, but no side heads. All three belts have chains and hanging gods attached to the sides of the belts (as does the Leiden Plaque belt). The compositions of the chains vary in the Early Classic examples; at Palenque, they are composed of alternating *yax* and jade signs, identified by David Stuart (personal communication, 1981) as blood. The gods hanging from the chains in the Early Classic examples also vary; at Palenque, they are the zoomorphic version of GI, identified by the shell earplug, gathered hair, and curvilinear eyebrow.

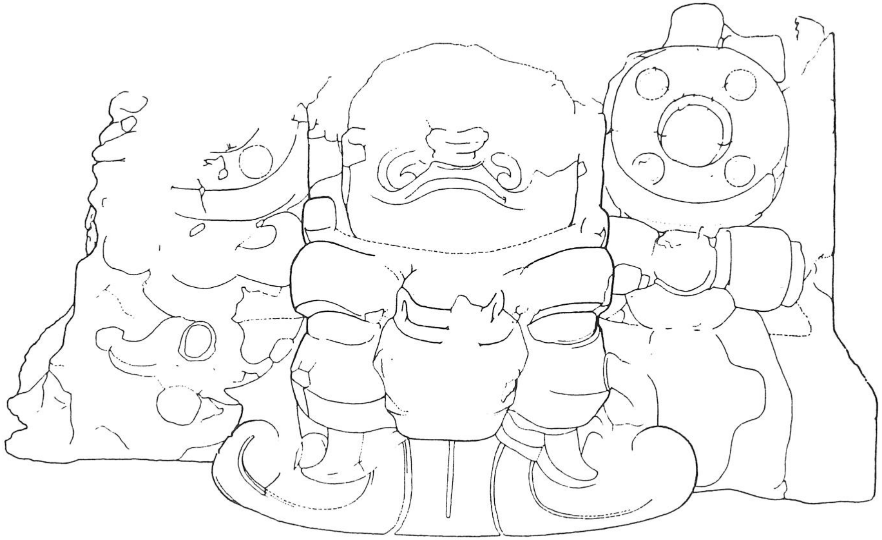
In creating the charter for the political and religious structure of Late Classic Palenque, Chan-Bahlum chose to portray himself in the Early Classic ''uniform,'' which was abandoned as a major form at Tikal after 9.2.0.0.0. The choice of archaic costume and the emphasis on the gods of the Triad, so prevalent in the Early Classic cache complex, was deliberately evoked as the basis of political sanction; it legitimized the Palenque lineage at the most ancient and most orthodox level of Maya political and religious thought and cosmology. If we are correct, the Early Classic examples of the "uniform" are manifestations of an even more ancient and orthodox level. The flanged headdress, one of the most important and widely distributed forms of royal headgear, is linked directly to the standard iconography used on Late Preclassic architectural façades. In Late Preclassic contexts, the flanged headdress was associated with blunt-snouted and long-snouted zoomorphs in a cosmogram delineating a fundamental world view. In the Classic period, this headdress became a centrally important part of the "uniform" of rulers and of the iconography of GI and GIII of the Palenque Triad; at Palenque, this "uniform" and headdress were featured in iconography designed to create a charter for lineage legitimacy.

THE BLUNT-SNOUTED ZOOMORPH AND THE CRULLER-EYED JAGUAR GOD

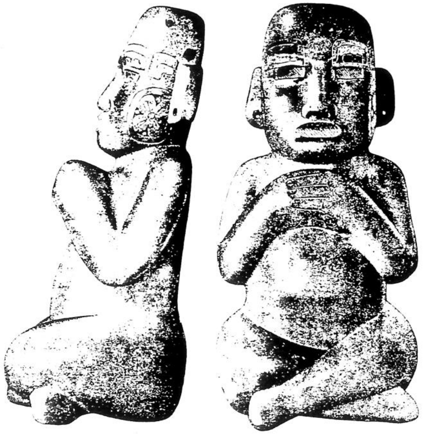
The lower heads of 5C–2nd at Cerros (fig. 2.3) represent the zoomorph that appears most frequently in Late Preclassic compositions in the Maya Lowlands. It occurs as the main mask also on El Mirador Structure 34 on and Uaxactun E–VII sub, and as the lower (chin) mask on Cerros 29B and Tikal 5D–3–3rd. On 5C–2nd, this beastie is characterized by a blunt snout, eyes with a squint in the lower, inner corner, and large eyebrow plates marked with a U shape. The forehead is divided into three sections: the center one contains a bead and the flanking ones an incurling scroll. Both sides of the head are marked by a *kin*-sun sign painted within a three-quarter cartouche; the presence of this sign suggests an identification of this beastie as the Sun.

On Cerros Structure 29B, the iconography of 5C–2nd is divided between three buildings; the outer ones display the long-snouted beastie of the upper panels of 5C–2nd and the center one the blunt-snouted head. While the earplug assemblages of 29B are consistent with those of 5C–2nd, the arrangement of heads is not. In all cases, the 29B heads occur in stacks, with a more anthropomorphic head atop a zoomorphic one. The lower heads of the central building (fig. 2.6) are clearly jaguarish, with large canine teeth and a three-part mouth emanation (the emanations of the flanking earplug zoomorphs on 5C–2nd are the same motif seen in profile view). Although the upper heads on 29B are badly damaged, each had a downturned mouth with an incurling fang in each corner. This mouth pattern also occurs in exact detail in the mask of Tikal 5D–Sub.3–3rd and on El Mirador 34, where the beastie also has the lower front teeth and fangs of a feline and jaguar paws around the ear flares.

The process of anthropomorphizing suggested by Cerros 29B is confirmed by a



2.6 Drawing of stucco mask from Cerros Structure 29b. (Redrawn by Linda Schele after Freidel 1981.)

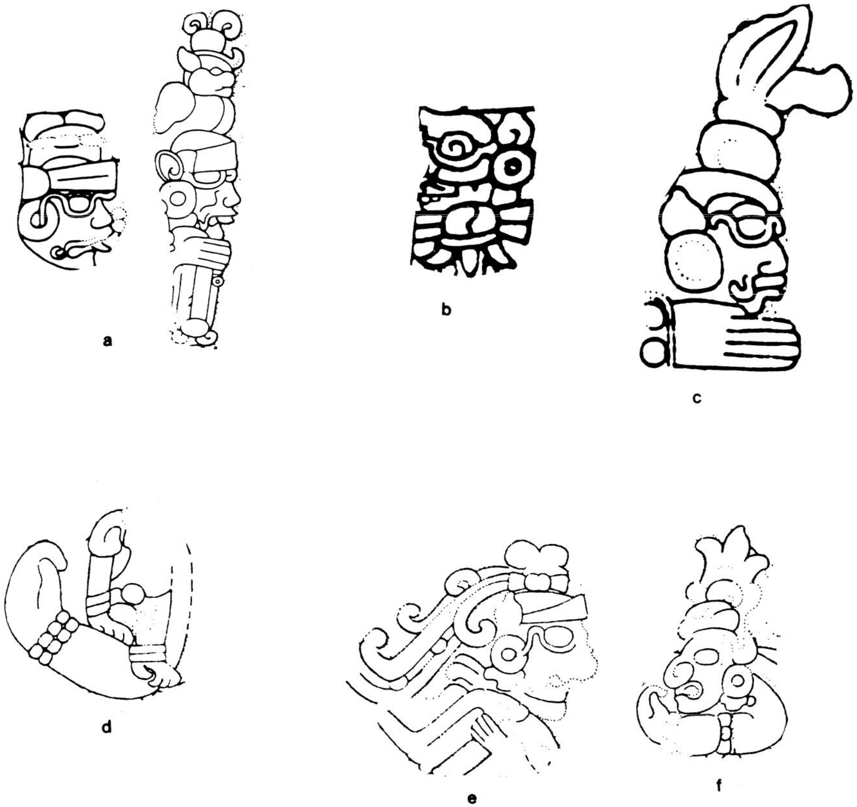


2.7 Greenstone figurine from Uaxactun Group A. (After Kidder 1947:fig. 37.)

greenstone figurine from Group A at Uaxactun (fig. 2.7) and by Structure N9–56 at Lamanai. The figurine is a fully human male, seated cross-legged. The treatment of his head matches exactly that of the lower heads at Cerros 5C–2nd; a *kin* sign is infixed on either cheek, and the Cerros eyebrow motif is placed above the right eye. The presence of a bifurcated shape at the side of the forehead may reflect the Late Preclassic "crown" discussed earlier. Either the figurine is a historical person wearing the symbols of the supernatural or it is the personification of the supernatural being from Cerros.

The Uaxactun figurine has the headband of the Tikal Burial 25 mask, the upper heads of the Cerros program, and the *kin* sign that marks the lower heads. A Late Preclassic stucco façade found under Lamanai N9–56 associates all these attributes with the Classic-period Jaguar Lord of the Underworld and Number Seven or GIII of the Palenque Triad. The head on Lamanai N9–56 is badly damaged, but it has the proportions of an anthropomorphic form and the expected ear-flare assemblage. More important, the damaged plaster surface shows that a ridge of plaster ran under each eye to converge in a twisted shape resting atop the forehead above the nose.

The combination of features on these Late Preclassic examples allows us to identify the lower mask on Cerros 5C–2nd as the Sun and the prototype of the Classic-period Jaguar God, but in what contexts does this supernatural being appear in the very



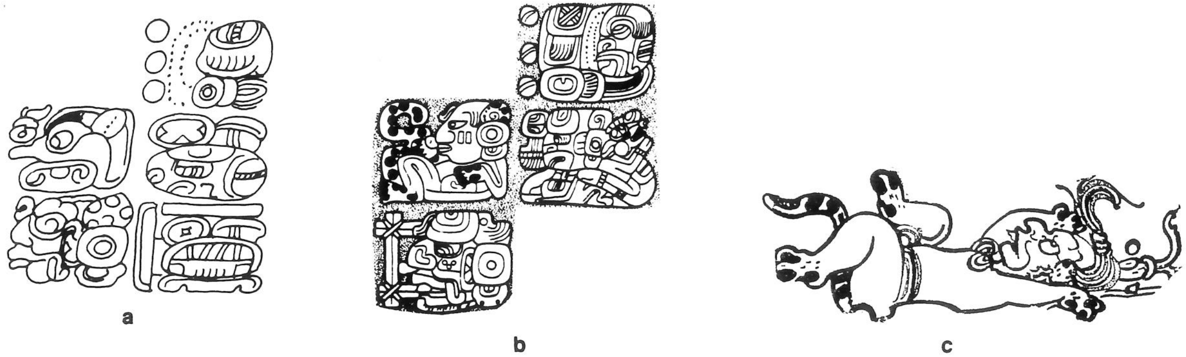
2.8 GIII/Jaguar God heads. a. Tikal Stela 29. b. Leiden Plaque. c. Tikal Stela 4. d. Tikal Stela 18. (Drawings by Linda Schele.) e. and f. Tikal Stela 36. (Redrawn after W. R. Coe after Jones and Satterthwaite 1982.)

early past of the Classic period, and who is he? These questions are best addressed by examining Early Classic Tikal monuments. Stela 29, the earliest dated monument of the Classic period, has two examples of the Jaguar God: one is held in the ruler's hand as an icon, and a second, with the Tikal Emblem Glyph atop its head, is attached to the belt or the front of the chest (fig. 2.8a). On the Leiden Plaque, the god is attached to the front of the belt (fig. 2.8b); on Stela 4, it is held as an icon (fig. 2.8c); on Stela 18, it appears in the crook of the arm and in full-figure form (fig. 2.8d); and, on Stela 36, the anthropomorphic version is held in one hand, while the zoomorph rests in the crook of the other arm (fig. 2.8e, f). The Jaguar God has been transformed from the central element of Late Preclassic façade composition to a held or worn symbol of royal office to be publicly displayed by Classic rulers in legitimization procedures.

The identity of this god can be established by comparing inscriptions at Caracol and Tikal to the iconography of Tikal Stela 31. Berlin (1963) first discussed the Palenque Triad gods, identifying TIII.568.41:59 as a glyph that introduces phrases containing the names of these gods. Although phrases containing this introductory glyph are rare outside Palenque, two examples yield important information. Caracol Stela 16, dated 9.5.0.0.0 (fig. 2.9a), includes a Triadic expression beginning with the introductory glyph, followed by a *tahol* vulture with a *uinal* sign in its mouth. The occurrence of the latter glyph in a Triadic expression is unique and its meaning unknown. However, the third glyph is the God C variant that frequently occurs in the center of loincloths and on the bases of tree images; here, it wears a glyph, *Ah Kin*, 'He of the Sun,' atop its head. The same image occurs iconographically as the sky frame on a Middle Classic façade at Lamanai. The *Ah Kin*/God C variant is followed by our cruller-eyed, jaguar-eared god, with a *kin* sign infixed on the cheek, and a *na ho ahpo chaan*, 'first five lord sky,' glyph that appears in the name phrase of GII on the doorjamb in the Temple of the Foliated Cross at Palenque. That the cruller-eyed character is one of the Triad gods is confirmed by the occurrence of his portrait head in Triadic expressions with the introductory glyph on the Tablet of the Foliated Cross at Palenque (L4) and on the Hieroglyphic Stairs at Naranjo.

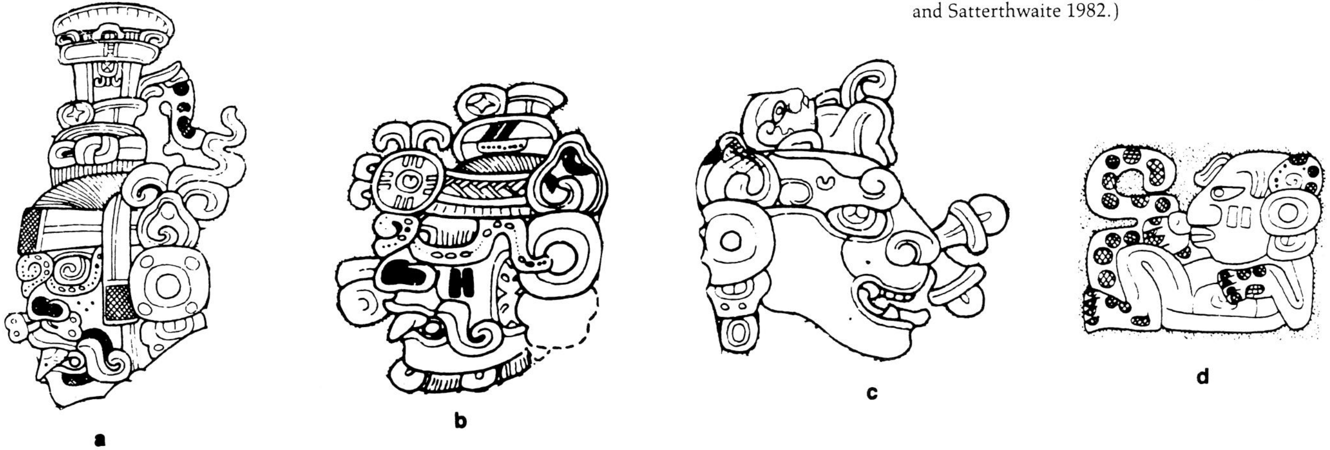
The second Triadic expression of interest is found on Tikal Stela 26 (fig. 2.9b), dated stylistically at around 9.8.0.0.0. The introductory glyph is followed by a reclining figure with the T1008 *xib* head, a human body with jaguar paws, tail, and ears. The posture and jaguar characteristics of this reclining figure are very close to those of a figure on the Metropolitan Museum of Art pot (fig. 2.9c); this figure has the squint-eye characteristic of the Sun God and the curvilinear eyebrow and gathered hair of the cruller-eyed character. In the Tikal inscription, the reclining figure is followed by the

2.9 The Palenque Triad. a. Caracol Stela 16. b. Tikal Stela 26. (Redrawn after W. R. Coe.) c. Metropolitan Vase. (After M. D. Coe 1972.)



same God C variant, but here, rather than having *Ah Kin* above it, it holds a deer, the animal that stands for 'days,' *kin*, in Distance Numbers. The final glyph is a normal sun-god head complete with squint-eye and *kin*-cheek infix. Both the Caracol and Tikal examples contain more than one glyph, but two of the Caracol names are marked with *kin* signs, and the last glyph is a title associated with GII of the Triad at Palenque. The Tikal example has a reclining jaguarian anthropomorph, the same God C found at Caracol, and a sun god. Do these names record a Triad different from that of Palenque, and are three separate personages named? Because both GI and GII were important in Early Classic iconography, and because five of the six names are marked as or associated with the Sun, we suggest that the scribes were recording one god with a series of different names. GIII is so named in his birth record on the Tablet of the Sun at Palenque, where his name phrase includes, among other names and attributes, *Mah Kina Balan Ahau* (T74.184.539), *Kin* + T606:23 and a decapitated jaguar, and the *Mah Kina Ahau Kin* (Lounsbury 1985) glyph most commonly used to name him at Palenque.

Identification of the reclining figure from the Tikal inscriptions with the cruller-eyed GIII from Caracol and, further, his anthropomorphic-zoomorphic duality are confirmed by Tikal Stela 31, on which Stormy Sky is shown standing with a chain above his head. His head is marked as the personification of the Tikal Emblem Glyph, and his deceased father floats above him in declaration of his legitimacy. In his left arm,



2.10 GIII variants. a. Head held in the arm on Tikal Stela 31. b. Front belt head on Tikal Stela 31. c. Rear belt head on Tikal Stela 31. d. Tikal Stela 26. (Redrawn by Linda Schele after Jones and Satterthwaite 1982.)

he holds GIII with the Tikal Emblem Glyph (fig. 2.10a); however, the most important GIIIs are on the belt. The front belt head has the squint-eye of the Sun God (fig. 2.10b), but with the squint in the lower inner corner, as on the Cerros head. The Tikal head has the cruller, jaguar ear, and infixed *kin* sign of the Caracol GIII (fig. 2.9a), and it has the flower headband also seen in the zoomorphic jaguar headdress (fig. 2.1e) of the Leiden Plaque (with a *nicte* flower replacing the more common bell-shaped flower).

At first glance, the rear belt head on Tikal Stela 31 appears to be that of a naturalistic jaguar (fig. 2.10c), but a closer look shows it to have the scrolled eyebrow characteristic of the anthropomorphic versions of GI and GIII. Furthermore, a figure with upraised tail reclines atop the jaguar's head. Although the presence of a jaguar ear is debatable, the figure clearly has the *xib* head[1] of the reclining jaguarian anthropomorph of Stela 26 (fig. 2.10d). It reclines above the Stela 31 jaguar head as a semantic determinative to insure that the viewer reads the head not as a naturalistic jaguar but as a member of the Triad—as GIII. Therefore, the cruller-eyed GIII of the Caracol Triadic expression and the reclining anthropomorph of the Tikal expression are different versions of the same god—the Jaguar Sun. This identification can be extended to include the lower heads on 5C–2nd at Cerros.

The inscriptions at Palenque, among other things, name GIII as *Ahau Kin* (Lounsbury 1985). He is a sun god, perhaps one of many. Furthermore, the vesting of identity in different, but apparently equivalent, variants—marked with predominantly anthropomorphic or zoomorphic features—that began to appear on Cerros 29B continued into the Classic and was the basis of the contrast of the GIII heads on the belt of Stormy Sky. The Late Preclassic Maya developed GIII as a major component of their cosmology, and at least one god of the Palenque Triad was inherited by the Classic Maya as a developed complex.

THE BICEPHALIC SERPENT BAR AND THE CELESTIAL MONSTER

Each register on Cerros 5C–2nd is framed with a border marked by J-scroll brackets with a serpent head at either end. Quirarte (1973), Norman (1976), and Freidel (1981) have noted similar double-headed serpent and J-scroll motifs on stelae at Izapa, where their structural contexts identify them as sky registers. The serpent frames recur at Kohunlich in a context identical to that at Cerros, except that the zoomorphic heads of Cerros are replaced by square-eyed anthropomorphic heads reminiscent of the later incensario complex at Palenque. The identification of the double-headed serpent frames at Izapa as sky motifs seems appropriate at Cerros, especially since, in both Cholan and Yucatecan languages, the words for 'sky' (*chan* or *caan*) and 'snake' (*chan* or *can*) are homophonous, making 'serpent' a particularly appropriate visual metaphor for 'sky.' 'Sky' and 'serpent' glyphs interchange phonetically in the Maya writing system. The term "serpent-sky frame" is used here for the Late Preclassic serpent border, in order to avoid confusion with the term "skyband."

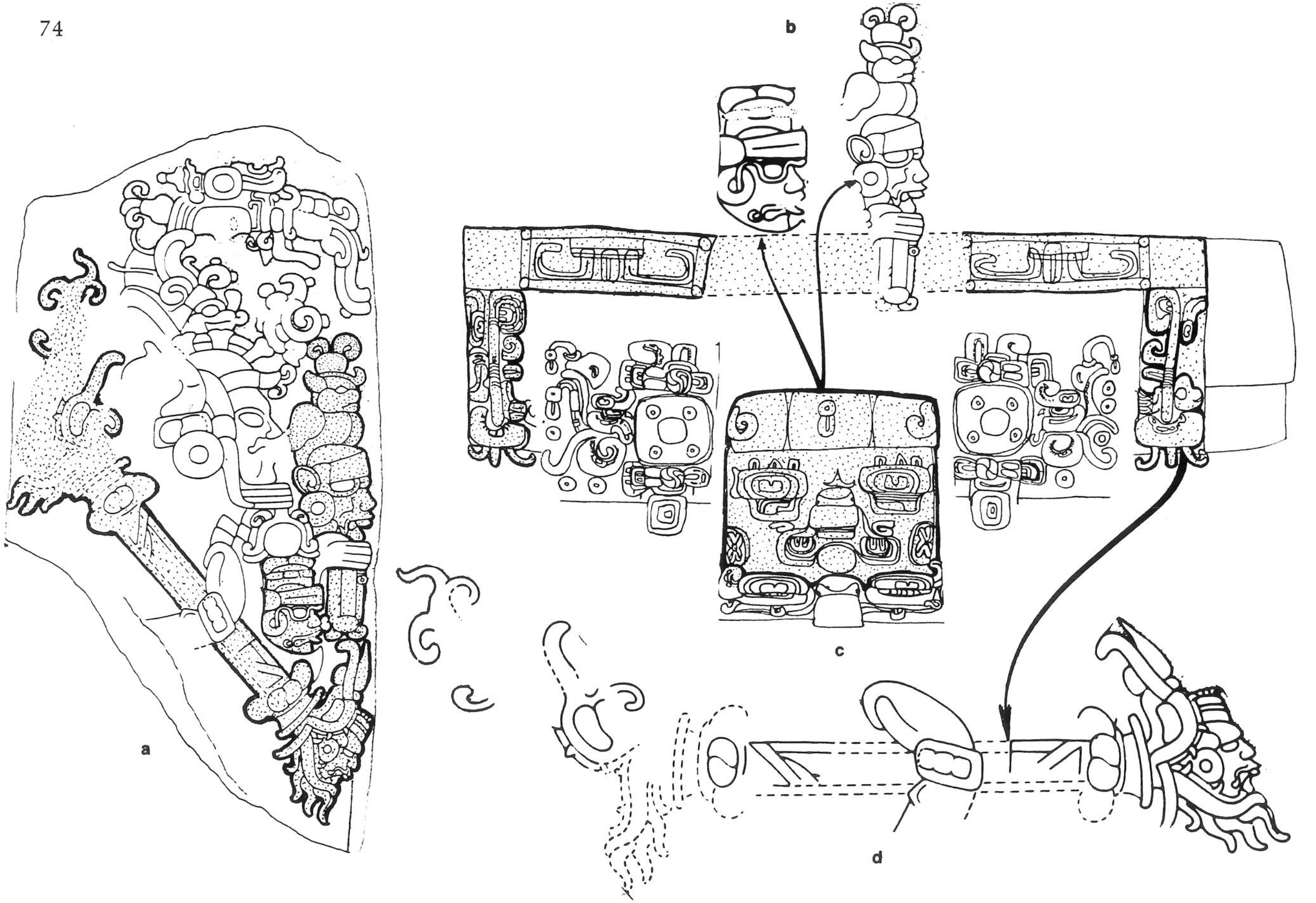
---

[1] The reclining figure is not clear in published drawings of Stela 31, but careful study of detail photographs of this character show that the profile is human. The upper contour of the head is marked by the double line characteristic of the *xib* head (T1008), but, rather than having the expected round earplug, the reclining figure has a human ear. The tail and paws do not seem to be marked by jaguar spots, but the tail is anatomically a tail, not the scroll-and-comb affix found in reclining versions of GII. The lack of jaguar spots is troublesome, but the immediate association of this figure with a jaguar head may have been considered sufficient, in conjunction with the posture and the *xib* head.

Like the lower heads and earplug assemblages of Cerros 5C–2nd, this "serpent-sky frame" became part of the Classic-period symbol repertoire, but its function changed dramatically, for it became the frequently displayed royal symbol, the double-headed serpent bar. The J-scroll-and-bracket motif marking the body of Late Preclassic serpents was replaced in the Classic by various symbols, including the mat and crossed-bands signs (which have the highest distribution), serpent markings, skeletal segments, David Stuart's "blood" signs (this volume), and jade. In the earliest example of the serpent bar, on Tikal Stela 29, the head that emerges from the mouth is the lower head from Cerros 5C–2nd. The Late Classic rulers dismantled the Cerros composition to provide the major symbols of their position (fig. 2.11): the outer serpent-sky frame was moved to the center to be a sign of office and of its cosmological sanction; the central head of the lower panels was used both as the head emerging from the serpent bar and as an icon—another kind of scepter—displayed like the serpent bar and in addition to it; and the living ruler wore the headdress of both the upper and lower heads (fig. 2.4). In the Classic period, the ruler substituted himself for the supernatural beings of Late Preclassic cosmology.

Several questions emerge. If the "sky frame" of the Late Preclassic period became the serpent-bar scepter of the Classic period, what occupies the semantic niche of "sky" in the Classic? If GIII is prominent in Late Preclassic iconography, where are GI and GII, and when did they enter the symbol system? The first question is answered most easily by identifying the image that occurs in a position analogous to that of the sky frame in the Late Preclassic. The Celestial Monster is the icon that functions as the cosmological frame in the Classic period, appearing not only in pictorial scenes, as on Piedras Negras "ascension" stelae, where it frames the niche in which rulers are seated, but also on actual doors and stairways through which Palenque and Copan rulers walked.

This innovation in the celestial frame was most likely a response to the ambiguity resulting from the change of function of the double-headed serpent from a symbol of the sky to the scepter of office. How was the viewer to interpret the double-headed



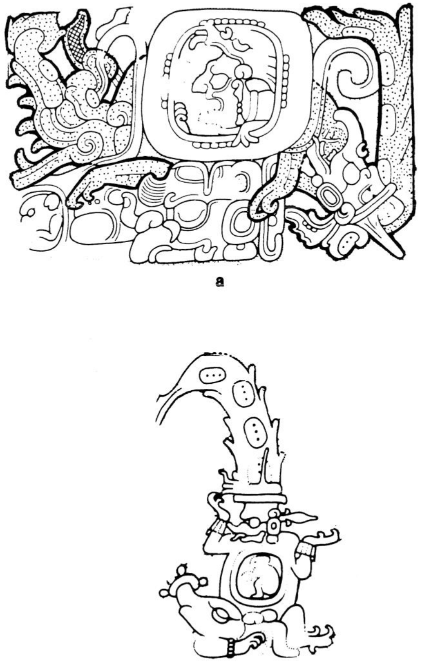
2.11 The transformation of the sky frame into the double-headed serpent bar. a. Tikal Stela 29. b. GIII heads from Tikal Stela 29. c. Lower masks from Cerros Structure 5C–2nd. d. Double-headed serpent bar from Tikal Stela 29. (Drawings by Linda Schele.)

serpent? This must have been a major problem, because the Classic Maya turned to a different animal model, the caiman, for the new image, abandoning the ready-made metaphor of the *caan-can*/'sky-serpent' homophony.

A close look at the Celestial Monster of the Late Classic period shows a set of traits that allows an investigation of the Early Classic image. The creature is saurian, with a long-muzzled front head and a blunt-muzzled one at the rear; yet, unlike the Late Preclassic serpent-sky frame, it is not a double-headed image. This is best demonstrated in two occurrences of the monster on the Yaxchilan hieroglyphic stairs. Stair VIII of Structure 33 (fig. 2.12b) shows the rear of a kneeling ballplayer who wears the Celestial Monster as a backrack decoration. The front head of the monster points downward; its cartouche-marked body clearly shows four legs. The rear head rests between the rear legs, but the tail emerges from behind it. Step III of Structure 44 (fig. 2.12a) exhibits the same form, with the monster in profile and a cartouche as the body. The front and rear legs are clearly delineated, and, as in Structure 33, a caiman tail emerges from behind the rear head. The monster is a single-headed body based on the caiman and complete with tail; the rear head is appended to the body as a burden it carries (occasionally, it appears without the appended head). The fact that the rear head can stand alone as an object acted upon by other entities, such as GI and GIII, supports this assumption.

The rear head of the Celestial Monster has been discussed by Kubler (1969), Greene Robertson (1974a), and Schele (1974, 1976). Its features blend skeletal and fleshed traits, but the critical traits are the helmet marked with a *kin* sign and the shell/stingray-spine/crossed-bands symbol attached to the helmet. The Sun identification can be based solely on the presence of the *kin* sign, but, more important, the *kin* without the three-part symbol was a major component of the sign for 'east' during the Classic period. The use of the helmet in the glyph for 'east' has been explained linguistically by John Justeson (n.d.) as a conflation of the profile view of a bowl with an infixed *kin* sign. Justeson argues[2] that a bowl (*lak*) was used as a rebus to record *lak'* in *lak'k'in*, etymologically 'other, next, following Sun.' An early use of this rebus in an iconographic context survives at Kohunlich, reinforcing the identification of the Quadripartite Monster as a version of the Sun. The three-part symbol attached to the bowl-Sun sign appears to designate the realms in which the beastie operates: the shell refers to the Underworld, the stingray spine to the middle world, and the crossed bands to the sky.

The long-snouted front head of the monster usually has numerous protruding teeth. The eye, always lidded (in contrast to that of the lidless serpent), usually has a crossed-bands or *lamat* sign infixed in it. Glyphic and pictorial versions of this head



2.12 The Celestial Monster from the Classic period. a. Lower register of the center, upper stair of Yaxchilan Structure 44. b. Backrack detail from Step VIII, Yaxchilan Structure 33. (Redrawn by Linda Schele after I. Graham 1977, vol. 3:3.)

---

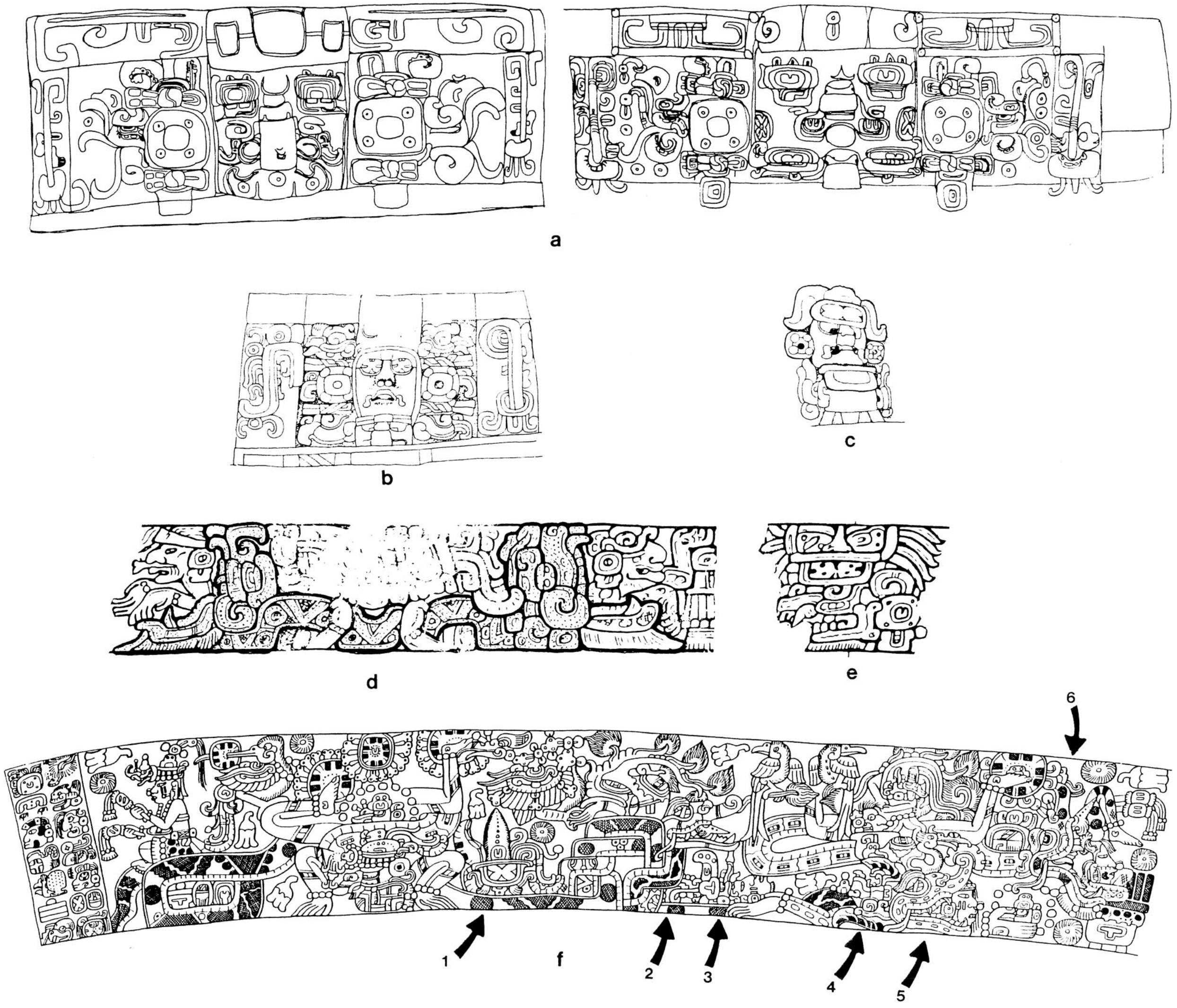
[2] Justeson (n.d.) proposes to solve the problem of the glottalized consonant in the *lak.lak'* rebus in one of two ways: (1) "that the infixed *k'in* in the plate is intended to indicate that the plate sign is read *lak'* (its usual value when preceding the T544 *k'in* sign) when the infix is present and *lak* at other times," or (2) that "morphophonemic changes in Yucatec may account for the spelling. When combining morphemes leads one *k'* to precede another, the first is realized as ʔ; thus **lak'-k'in* 'east' should have been realized as *laʔk'in*. . . . Similarly, when final *k* comes to precede *k'* at a morpheme boundary, it is realized phonetically as *h*; thus a hypothetical **lak'-k'in*, corresponding to the overt spelling of the word for 'east' in the classic era, would appear as **lahk'in*. The conventions of Mayan writing seldom distinguish among *h*, ʔ, and Ø, and do not distinguish them at all preconsonantally; thus a hypothetical **lahk'in* (⟨**lak-k'in*) would not be distinguishable from *la(ʔ)k'in* (⟨**lak'-k'in* 'east')."

often have a small oval with a line of three dots inside, a motif that appears exclusively on the head and body of this creature. The saurian feet can be replaced by deer hoofs; a deer ear, often with an infixed *lamat* sign, can be attached to the head. The body is variable: it can appear as a caiman, a sky band with T566 serpent markings, the *cauac* head, blood, or a cartouche. The body variations appear to specify particular manifestations of the general class represented by the monster.

The development of the Celestial Monster as an icon can be examined in a comparative study between three early compositions and that of Cerros 5C–2nd. The Kohunlich façade is composed of three (possibly four) terraces, with the lower levels displaying anthropomorphic heads flanked by the ear-flare assemblage in the serpent-sky frame (fig. 2.13b). The upper terrace presents an image new to the Late Preclassic complex, one that appears to be the prototype of the Quadripartite Monster (fig. 2.13c). The blunt-snouted Kohunlich head closely resembles the later Quadripartite Monster. The eyes have the lower, inner squint of the lower head at Cerros, and the forehead has a *kin* cartouche, with an *ahau* knot atop it. The cartouche lacks the bowl shape of the Classic version; moreover, on the Late Classic monster, the bowl appears not as the forehead but below the head, and without a *kin* infix. A three-legged object flanked by two serpent heads (perhaps a reference to the serpent-sky frames below) is placed below the bowl. This Kohunlich head appears to belong to a period in which the bowl rebus for 'east' and the final form of the Quadripartite Monster were not yet fully developed.

The vessel MT. 140 (fig. 2.13d), dated by Coggins (1975:203) at 9.1.0.0.0–9.2.10.0.0, was found in the Central Acropolis at Tikal in Cache 198. The scene exhibits either a retention of the Cerros scheme into the Early Classic or a deliberately archaic reference to the Late Preclassic complex. A central human figure, seen from the chest up, holds, with the gesture particularly associated with the double-headed serpent bar, a double-headed form with serpent markings on the body. The heads of this creature are not serpentine, however; the front head is the long-snouted upper head from Cerros 5C–2nd, and the rear head is a Waterlily Jaguar complete with an *ix* eye. The creature seems to be a conflation of the entire composition at Cerros, with the upper head joined to the lower by the body of the serpent-sky frame. The assemblage replaces not the cosmogram of Cerros, but the double-headed serpent bar that was derived from the serpent-sky frame. The personages emerging from the heads are the Aged Stingray God (in the front head), and a jaguar character (in the mouth of the rear head). These are the Paddlers from the canoe scenes on the carved bones found in the Late Classic Burial 116. The MT. 140 scene is completed by the rear head of the Classic-period Celestial Monster—the Quadripartite Monster (fig. 2.13e). Here, however, it is not attached to the caiman body but stands alone.

The final scene of interest is the extraordinarily complex one on the Deletaille, or Belgian, Vase (fig. 2.13f), which should be roughly contemporary with the Tikal vessel

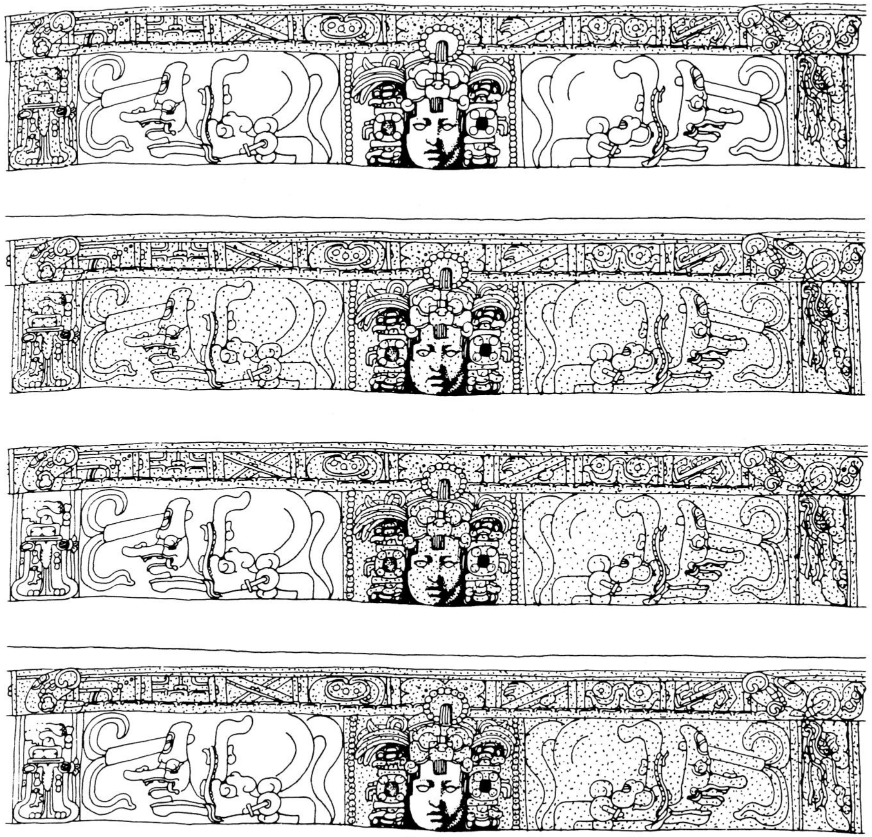


2.13 a. The upper west and lower east masks from Cerros Structure 5C–2nd. b. Stucco mask and Sun God from Kohunlich. c. Mask from upper terrace, Kohunlich. (a.–c., drawings by Linda Schele.) d. and e. Cache vessel from Tikal. (Redrawn by Linda Schele after W. R. Coe 1965b:30.) f. Deletaille, or Belgian, vessel. (Redrawn by Linda Schele after drawing by Lin Crocker.)

(see Hellmuth, this volume). The images of relevance to this argument are the serpent bodies lying along the lower edge, the precise number of which is difficult to determine. They terminate in long-snouted heads (nos. 2, 5, 6) marked with eyelids, a feature that distinguishes saurian from serpentine polymorphs in the Maya symbol system. Furthermore, two of these heads have curling snouts (nos. 2, 5) to mark them as the front head of the Celestial Monster, an identification reinforced by the row of ovals discussed previously as a trait of the Celestial Monster. Although the heads of these serpents are clearly saurian, and two have features that associate them with the Celestial Monster, the bodies are legless and serpentine. In addition, the *kin* bowl and Quadripartite badge (no. 1) sit atop the body of the left serpent, and a variant of this badge, specific for GIII, sits atop the central one (no. 3). The front head of the central body also has an inverted jaguar head attached to the back (no. 4), further associating it with the GIII jaguar complex. All features of the Celestial Monster are present in the composition, but they are attached to the bodies of serpents, not of caimans, as would be expected in the Classic-period symbol system. This pot may display deliberately archaic forms, or it may come from a transitional period before the final image was set; in either case, it documents the change from a serpent to a caiman model for the celestial symbol.

The full pattern of derivation and the continuity from the Late Preclassic to the Classic complex is manifest in one Late Classic structure, the north façade of the Palace at Palenque. The original façade, built during Kan-Xul's reign, was buried by a later façade, which allowed some detail of the earlier composition to survive. Five terraces, four of them decorated with outset panels, flanked either side of a broad central stairway. The lack of a major entrance into the Palace on the north side suggests that these stairs and terraces were designed as a stage for ritual activity. The decoration of no single terrace survives intact, but, by combining details of the four exposed terraces, it is possible to reconstruct the complete composition.

The central section of each panel (fig. 2.14) displayed a human portrait (two of which survive) wearing the flanged headdress. The ear-flare assemblages, which survive only on the upper west terrace, had knots and personification heads above and below the central disk. The snout-and-nostril motif is appended to the disk. The upper zoomorphic head of the headdress is too badly damaged to be identified, but it clearly wears the flower band associated with this iconography, especially with the Principal Bird Deity (A. Stone 1983), which is often shown sitting atop the Celestial Monster. The flanking areas are recessed about 12cm, and each is filled with half of a double-headed serpent bar; that is, the serpent bar is spread between the two panels, as if the ruler were holding it. Details of the outer framing band survive only on the two lower, west terraces; both clearly show the rear head (the Quadripartite Monster) of the Celestial Monster. Originally, the body continued along the upper border; the front head



2.14 Reconstructed terraces on the north façade of the Palace at Palenque. (The stippling denotes areas now totally destroyed or unavailable for examination.) (Drawings by Linda Schele.)

must have been on the western end of the frame, facing west, as is to be expected from other Palenque examples.

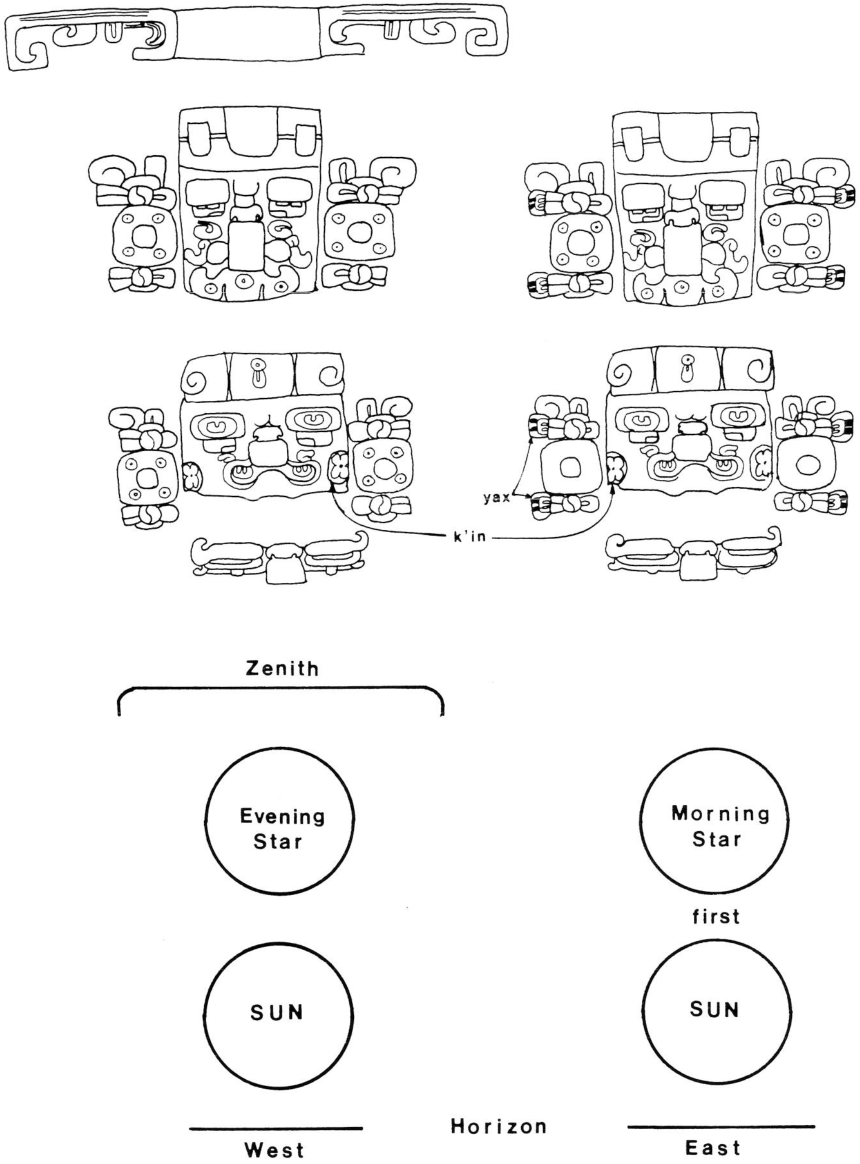
A comparison of the Cerros (fig. 2.3) and Palenque (fig. 2.14) façades demonstrates the evolution of the imagery. The central zoomorphs at Cerros have been replaced at Palenque by the portrait of the ruler Kan-Xul and moved upward into the headdress to function as a supernatural container for the ruler. The human being has been made supernatural by this replacement, and by being framed by the supernatural being. The ear-flare assemblage appears without alteration. The serpent-sky frame from the outer border at Cerros has been moved inside to become the double-headed serpent bar with a God K emerging from either mouth. The Celestial Monster, invented to replace the Late Preclassic serpent-sky frame, appears in the outer border, marking the cosmological contest as celestial. The Palenque façade was designed as a stage for ritual activity involving the legitimization of Kan-Xul's position, as is demonstrated by the presence of the Palace Tablet in the corridor above this façade. The imagery is derived directly from the Late Preclassic iconography at Cerros, Tikal, El Mirador, and other contemporary sites.

THE CERROS COMPOSITION AND THE PALENQUE TRIAD

The Classic equivalents of the Cerros composition components have been identified with one exception—the upper, long-snouted heads. This identification is more problematic, since it is based on much more circumstantial evidence. Structure 5C–2nd is situated in the north with the decorated façade facing south, so that a viewer looking north from its associated plaza would see the building and the arc of the northern sky. This placement is critical to the understanding of the composition, which is made up of a series of horizontal and vertical contrasts (fig. 2.15). Horizontally, there are two sets of contrasts: (1) the knots in the earplug assemblages of both eastern heads have attached *yax* signs, while the western heads are unmarked; (2) the eastern serpent-sky frame of the upper terrace is marked by J-scrolls and brackets, while the western upper frame has the downturned mouth of an inward-facing profile zoomorph on either side of the main head, presenting a massive split representation of the monster, with the main mask emerging from its gullet. The sky frames of both lower terraces are undifferentiated. In the vertical dimension, the contrasts are also twofold: (1) the lower terraces have blunt-snouted heads contrasting with the long-snouted beasties above; (2) the lower heads emerge from a long-muzzled head, which is absent in the upper panels. The foreheads of these basal heads are deliberately shaped closures that embrace the lower jaws of the Sun heads.

These contrasts are deliberately featured and must carry significant meaning. The first contrast seems best discussed in terms of the glyphic identification of the lower head as the Sun.The eastern heads are marked as *yax*; the western heads are unmarked. Barrera Vásquez (1980:971) glosses *yax* as 'en composición de nombres, cosa primera, la primera vez.' *Yax* meaning 'first' does not survive in modern Cholan languages, but *yax* as 'first' is used on Tablet XIV at Palenque, so this meaning existed in both Yucatecan and Cholan during the Classic period. This horizontal contrast, marking the eastern heads as the "first" members of each class, seems to refer to the rising eastern Sun, the 'first Sun'; the western Sun is unmarked. Presumably, the same contrast is intended with the upper masks.

Since the *yax* sign associates both eastern heads with "rising" in the east, the


yax
k'in
Zenith
Evening Star
Morning Star
first
SUN
SUN
Horizon
West
East

2.15 Diagram of the contrasting features in the mask façades of Cerros Structure 5C–2nd. (Drawings by Linda Schele.)

basal zoomorph under both lower heads should represent the location from which the Sun and a companion rise—the earth. The contrast in the sky frames of the upper panels, when seen in terms of "rising" and of the definition of the basal zoomorph as the horizon, signals a change in direction from upward to downward movement (fig. 2.15), implying the zenith or the place where the mouth of the sky spits out the Sun and its companion in their downward journey to enter the earth.

The façade of 5C–2nd is an integrated composition, incorporating a progression preceding the rising of the Sun and a companion, continuing to the western horizon, and following the setting in the west. The same composition occurs on the north façade of the Palace at Palenque. At Cerros, the progression delineated is self-contained in each terrace and repeated in all eight panels. At Palenque, the Celestial Monster conveys the long-snouted/blunt-snouted contrast, as well as the progression through the sky. The lower Sun head at Cerros corresponds to the Quadripartite Monster, which is also identified as the Sun. The front long-snouted caiman head of the Classic-period beastie should then correspond to the upper long-snouted zoomorphs at Cerros.

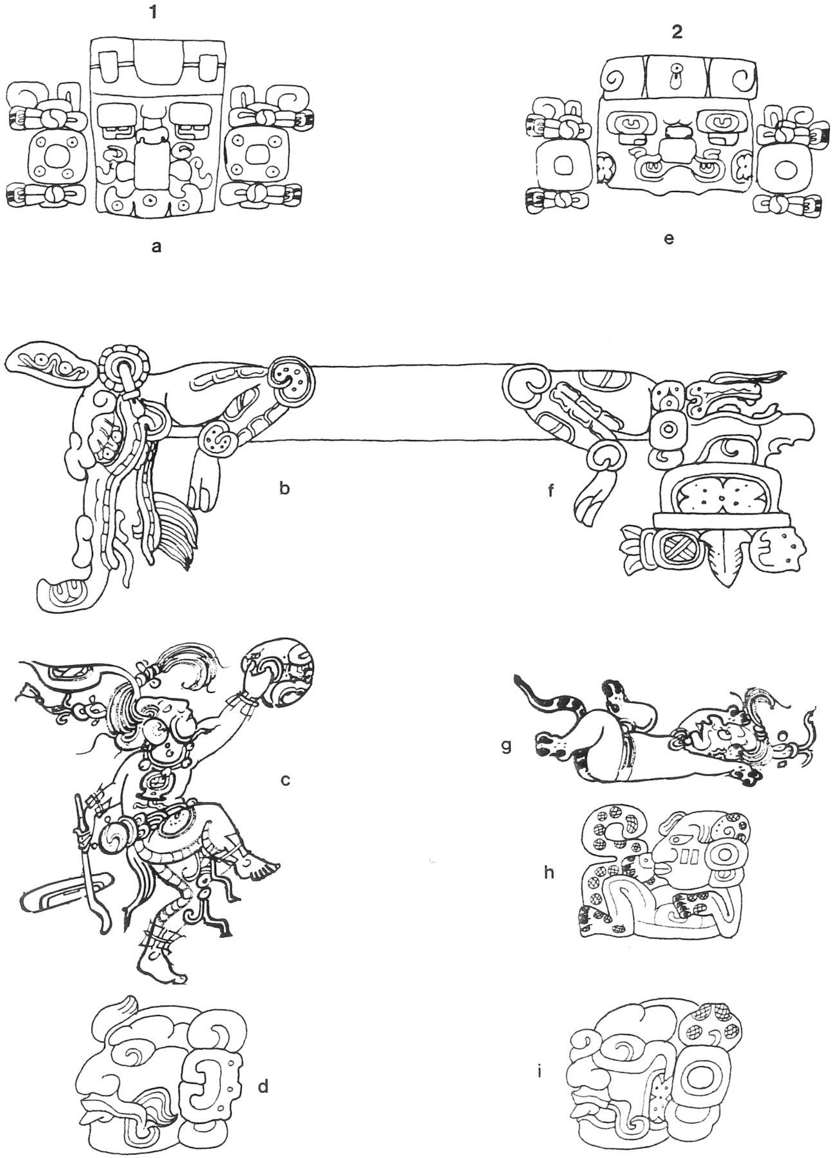
The Cerros composition is further clarified by the frequent identification of the front head of the Classic-period icon as Venus. If the rear head of the Celestial Monster and the lower heads at Cerros are the Sun, then the upper long-snouted head should represent Venus. The Cerros façade exactly reproduces the visual relationship between the movements of Venus and the Sun. As Morning Star, Venus precedes the Sun's rise above the horizon; as Evening Star, it follows the Sun's movement at sunset. Structure 5C–2nd is positioned so that viewers standing in the associated plaza could confirm the symbolic representation of this journey and the interrelationship of the movements of Venus and the Sun by direct observation of the sky. The symbolic representation of the movements of Venus and the Sun delineated at Cerros in the 5C–2nd façade was retained in the Classic period in the single symbol of the Celestial Monster, the front head of which is often marked with Venus signs.

The correspondence of the Celestial Monster with the 5C–2nd façade may seem to contradict our earlier identification of the lower heads at Cerros as the prototype of GIII, since an equivalence is also implied between those heads and the Quadripartite Monster. The evidence suggests, however, that both equivalences are correct. The Celestial Monster is a Classic-period innovation motivated by the transformation of the double-headed serpent from a symbol of the sky into a royal scepter. Furthermore, in the Classic period, the Celestial Monster was used for cosmological frames, door frames, and altars; as an independent object, the Quadripartite Monster could be worn, carried, or held by both supernatural and historical persons, but neither is shown interacting with other personalities. The Celestial Monster symbolizes environment and cosmological context, not personality. The Quadripartite Monster is the Sun as a cyclic phenomenon of the cosmos, not as a personality.

That the lower zoomorph of the Cerros façade underwent anthropomorphizing during the Late Preclassic is evident in the masks of Structure N9–56 at Lamanai and the jade figurine from Uaxactun. Human rulers wore symbols associated with the complex, as the greenstone mask from Tikal Burial 85 and perhaps the Uaxactun figurine demonstrate. By the beginning of the Classic, Maya rulers demonstrated their divine charter by setting their own portraits in place of the supernaturals of the Late Preclassic; this is seen on Tikal Stela 29. In the Late Classic, rulers dressed as the Triad gods. Copan Stela I, Yaxchilan Stela 11, and the Dumbarton Oaks Tablet from Palenque show rulers wearing the costume or mask of GI. Rulers at Naranjo and elsewhere appear with crullers around their eyes. Furthermore, the cruller-eyed god and the fish-barbeled GI are shown interacting with other supernaturals. The lower mask of Cerros is the Sun, but, in the Classic period, it became a personality manifested as GIII rather than a symbolic representation of cosmological or environmental phenomena. In this form, GIII, as the Sun, interacts with other supernaturals and with the human community.

If the lower head at Cerros is the prototype of GIII, then, by structural analogy, the upper head should be the prototype not only of the front head of the Celestial Monster but also of GI of the Palenque Triad (fig. 2.16). Unfortunately, no intermediate forms between the Cerros façade and the Early Classic manifestations of GI are securely identified; the identification must remain speculative until clear transitional forms are found in Late Preclassic iconography. Other arguments, however, can be brought to the problem. Lounsbury (1985) has identified GI as the Classic-period forerunner of Hunahpu of the *Popol Vuh* and has provided evidence recorded in stories from many Mayan languages suggesting that, in the Classic period, the older twin (GI) was associated with Venus. In his discussion of the Palenque Triad, Kelley (1965:114–122) incorrectly identified GI's name, but he did call attention to the Postclassic association of his birth date, 9 Ik or 9 Wind, with Venus. The front head of the Celestial Monster, already associated with the upper heads at Cerros, carries Venus markings in many examples. Moreover, in a number of examples from Yaxchilan and Piedras Negras, the front head of the Celestial Monster wears the shell earplug diagnostic of GI. We predict that evidence for the GI/upper-head identity will come to light in future excavations.

The Venus-Sun dyad proposition is supported by the treatment of the sky register on Late Classic stelae at Yaxchilan. Mary Pax (1983) has pointed out that the double-headed sky symbol was retained at Yaxchilan, but, as at other Classic sites, the model used was the legged saurian rather than the legless serpent of Late Preclassic imagery. The processual phenomena of the Venus-Sun pair are shown in two manners at Yaxchilan: (1) GI and GIII are seen emerging from the mouths of the heads, or, as on Stela 10, the shell earplug of GI is attached to one of the saurian heads, and (2) GIII and a Venus sign or GI and GII are shown attached to the bottom of the skyband body of the beastie. The combination of the glyphic Venus sign with a GIII portrait, as seen on



2.16 Transformations of the Late Preclassic program at Cerros into Classic analogues. *Set 1*: a. Upper heads from Cerros Structure 5C–2nd. b. Front head of the Celestial Monster. c. The iconic and anthropomorphic version of GI (after M. D. Coe 1973). d. Portrait head of GI used in glyphic expressions. *Set 2*: e. Lower heads from Cerros 5C–2nd. f. The Quadripartite Monster. g. The iconic and anthropomorphic version of GIII. h. GIII as *Ahau Balam*, from a glyphic expression. i. Portrait head of GIII used in glyphic expressions at Caracol, Naranjo, and Palenque. (Drawings by Linda Schele.)

Yaxchilan Stela 4, also occurs on the so-called Venus Stairs at Copan, but it is found in its most interesting manifestation in a Jaina figurine (M. E. Miller 1975:65), which shows the cruller-eyed GIII, with a Venus sign atop his head, seated on the back of the crocodilian Celestial Monster that has the same tail as the Yaxchilan examples and no rear head. The beastie carries GIII as a burden, with the Venus part of the dyad marked glyphically. The Maya could display the Venus-Sun dyad in various forms, including the long-snouted–saurian/Quadripartite Monster pair, the GI/GIII twins, the Venus glyph/GIII portrait, recombinations of these, and perhaps still unidentified manifestations.

Late Preclassic iconography has not yet produced evidence for a prototype of GII, known variously as God K, the Flare God, and Ah Bolon-Dzacab. The earliest example of God K now known is on the Leiden Plaque, where GII is shown emerging from the left head of a serpent bar. On Tikal Stela 4, he appears floating above Curl Snout, a position held by Stormy Sky's dead father on Stela 31. God K was strongly associated with lineage and ritual bloodletting in the Classic period; he may not have been introduced into the symbol system until the Classic period.

K'awil = Jester god?

Implications

Using comparative and structural analyses, we have tried to show that much of the iconography associated with the legitimization of political power and social structure in the Classic period was formulated in the Late Preclassic, when the symbolic model was based on the passage of the Sun through the sky and on the visual interaction of Venus, as Morning and Evening Star, with the rising and setting of the Sun. We have discussed the following continuities and derivations from Late Preclassic imagery that are found in Classic Maya iconography.

1. A headband displaying a central trifurcated element flanked by two curved, bifurcated shapes. The central element is found in simple and personified form and appears in the Classic period as the Jester God. The headband functions as a crown and as a semantic determinant for the *ahau* glyph.
2. A flanged headdress worn by supernaturals in the Late Preclassic and by historical persons, as part of the most orthodox costume of rulers, in the Classic, when the ruler's head was placed in the position occupied by the supernatural in the Late Preclassic period.
3. A double-headed serpent that functioned in the Late Preclassic as a sky frame and became the scepter of rulers in the Classic.
4. A symbolic model based on the rising and setting of the Sun and Venus, and delineated as a blunt-snouted and long-snouted dyad that became the

Celestial Monster in the Classic. The Celestial Monster was innovated to occupy the structural category vacated when the double-headed serpent changed into a royal scepter.

5. The prototypes of GIII and, by implication, GI of the Palenque Triad, who, in the Classic period, became the manifestations of the Sun and Venus as personalities capable of interacting with other personalities in the supernatural realm and in the human community.

The Late Preclassic Maya, utilizing components of a symbol system shared with contemporary societies throughout eastern Mesoamerica, developed a cosmogram based on the passage of the Sun and Venus. The effectiveness of the metaphor may have lain in its simplicity and in the ease with which the community could verify its reality by simply observing the sky. As the model was expanded and adapted to the needs of Classic societies, the functions of some components of the cosmogram were changed, and new images were innovated to occupy vacated structural categories. Two processes of change stand out. The historical identities of Late Preclassic rulers have not been found recorded in public space; this suggests that the personal and historical identities of rulers did not require verification in the form of public monuments. Exactly the opposite is true of the Classic period: the legitimization of individual rulers through genealogy and supernatural charter in public space with public participation seems to have been the prime motivation for the erection of public art. This contrast suggests that between A.D. 50, the latest date at Cerros, and A.D. 293, the date of Tikal Stela 29, political power became focused not only in a single lineage but in the historical identity of the ruler. This change may explain the merging of the Late Preclassic cosmogram with portraiture of historical rulers in the Classic period. These rulers legitimized their positions by claiming identity as the gods of the cosmogram.

Focus on personality in the Classic period may also explain the process leading to the development of zoomorphic and anthropomorphic variants of an entity. The imagery system of the Classic period retained these contrasts in the GI and GIII complexes; in addition, our analyses suggest that the Classic Maya split the program of Cerros 5C–2nd into two independent manifestations—the Celestial Monster, representing the processual and environmental phenomena of the passages of Venus and the Sun, and GI and GIII, representing Venus and the Sun as personalities who interact with supernatural and historical personages.

During the Classic period, the relatively simple imagery of Late Preclassic art (and presumably the mythology underlying it) was expanded to include a plethora of images representing environmental phenomena, such as earth and water, as well as supernatural personalities. The Late Preclassic cosmogram was retained as the Celestial Monster, but it also found expression in different visual and verbal metaphors; for example, a complex based on the homophony of the words for 'waterlily' and 'lake' and the passage of the Sun in a canoe was added to the repertoire. Classic-period iconography absorbed non-Maya elements, such as the "Tlaloc" complex, which appeared in the Early Classic. The most orthodox and ancient level of Classic Maya iconography, however, was formulated in the Late Preclassic. In its earliest manifestation, this fundamental symbol repertoire shared features with contemporary symbol systems in the southern Highlands and utilized concepts, such as the contrast between blunt- and long-snouted beasties, that may well have come from the ancient Olmec symbol system. Nevertheless, the particular assemblage in which these symbols were combined and the media (stucco sculpture) and format (the architectural façade) in which this assemblage was expressed were indigenous to the Lowland Maya.

The Classic Maya added other components to the system, some of them developed locally and others probably borrowed—for example, the Long Count calendar and the stela format. Regardless of the added complexity and the borrowed components of Classic art and iconography, however, the Late Preclassic cosmogram and its associated symbols remained the most fundamental and orthodox expression of the charter of royal position and of social structure for the Classic Maya.

Summary and Conclusions

Toward a Structural Analysis

We have presented two broad hypotheses. First, we have argued that the complex iconographic program of the Classic Lowland Maya evolved from a simpler program indigenously innovated in the Late Preclassic and used in the Classic to legitimize the power of rulers through supernatural sanction, and that the function of the Late Preclassic program was essentially the same, although the power changed from a general association with elite families to a specific association with rulers. Second, we have hypothesized that this Late Preclassic innovation occurred in the context of a rapid and profound reorganization of Maya society, in which a previous de facto elite became legitimate and acceptable to the general populace. The result was greatly expanded access to labor and goods, celebrated in the construction of massive centers. We have pointed to suggestive evidence that the demonstrable reorganization of Cerros into a center at the time this iconographic program was first formulated was not an isolated incident but part of a regional phenomenon.

Although the tactics of our argument have required us to focus on particular iconography and archaeological developments in the Late Preclassic, we intend to pursue these hypotheses within the context of a larger theoretical and methodological framework in an approach adopted from the structuralist school of anthropology. Our reasons are practical: the data base consists of an elaborate and pervasive symbol system reflecting reality as the Maya conceived of it and implemented it to achieve social goals. This symbol system is embedded in a substantial archaeological record of social organization spanning more than a millennium. Both archaeological and iconographic records document significant change over time. We posit the correspondence between archaeology and iconography as a determinative source of explanation for change in both sets of information. The notion that there is a determinative relationship between cultural reality, exhibited in symbols, and social action, manifested in patterned behavior, lies at the heart of the structuralist approach (Sahlins 1976).

In our view, neither domain can be seen solely as the product or the subsidiary of the other. Both domains have independent causes inaccessible to the other: deep structure of mind-organizing language and other symbol systems on the one hand, physical laws of nature on the other. Structuralism provides a framework and methodology for analyzing such models of reality, but our interest is in the juncture between the cultural "loaded" model of reality and social life. We harken to the functionalist notion that such models act as regulatory means of sustaining the reproduction of society. The fit between models of reality and social conditions is by no means perfect. On the contrary, models of reality expressed in symbols routinely focus on selected fragments of the range of actual social and natural conditions, unconsciously or intentionally. There is always dynamic tension between models of reality and actuality, and the latter can be as easily maladaptive and dysfunctional as adaptive and functional. The essential function of a model of reality is to cope with contradictions between the realms of social action (what processual archaeologists term "subsystems") that make up the totality of group experience. The idea that contradictions can exist between different behavioral strategies, such as subsistence technology and residential patterns (see Flannery 1973), is well established in the archaeology of complex societies. In the jargon, there are, within any given social system, components that are deviation-amplifying and others that are homeostatic-operating. When a society is relatively stable, when novelty is introduced into the system slowly, a cultural model can cope well, and the illusion of stasis is maintained. When change in social conditions is being assimilated relatively rapidly, as in the case of incipient complex societies of the "nuclear" areas of the world, the ability of a cultural model to cope with new or magnified contradictions through minor modification can be taxed to the breaking point. We call this point, at which the ideal espoused in the model of reality deviates so clearly from social actuality that a crisis is precipitated, a *threshold.* The Lowland Maya passed over such a threshold in the Late Preclassic period. The notion of a threshold effect can be couched in terms of an overall evolutionary framework for the correlation of cultural and social change in complex society.

Threshold Effect

In our view, Rappaport (1971:25–28) correctly identifies models of reality reified in religion, myth, ritual, and material symbol systems as instruments of collective response to existing social conditions. Such shared visions of reality aim at maintaining the status quo in the face of intrinsic contradictions, both within social conditions and between them and the cultural model. We also agree that such models are the foundation of political charters in complex societies (ibid.:37). Complex societies are inherently dynamic because of the internal diversity of their social orders and their permeable borders with diverse neighbors, and so their conserving cultural rationales come to points in time when they are overtly discordant with accumulated change in actual social conditions. We call these points "thresholds" because societies must pass through them successfully if they are to survive. Thresholds are characterized by *structural impasse*, a situation in which the content of reified models of reality must be revised to accommodate actual social conditions. This revision requires manipulation of the structural arrangement of axiomatic propositions about the world (ibid.:40), so that novel propositions become both rational and necessary.

There are three general responses to threshold. First, there is *bounce*, in which the society identifies the major deviations between the actual and the ideal but is unable to change the structure of the model of reality and, instead, attempts to rectify social conditions to bring them back into concert with the ideal. The ability to rectify social conditions is limited by the axioms operating in the current model of reality, which failed to avoid threshold, as in the case of the *gumsa-gumlao* cycle postulated by Leach (1954) for highland Burma. Second, there is *collapse*, in which the society addresses the cultural model but fails to solve the impasse and, instead, generates unsuccessful rationales that result in the disintegration of society into more stable lower-order fragments. Finally, there is *transformation*, in which the society succeeds in changing the model of reality by manipulating existing axiomatic propositions about the world to allow the assertion of novel propositions that accommodate the social conditions precipitating the crisis.

The conjunction of the creation of massive central places and the advent of a public symbol system celebrating hierarchical authority through cosmic sanction during the Late Preclassic in the Maya Lowlands is an example of successful transformation at a threshold. The southern Lowland Maya passed through a later threshold successfully at the Protoclassic/Early Classic interface (A.D. 200–300). The final Terminal Classic threshold (A.D. 800–900) witnessed the failure of the southern Lowland Maya cultural model and the collapse of the social system (Culbert 1973).

The Late Preclassic Threshold

To understand the structural impasse facing the Lowland Maya in the Late Preclassic period, we must turn to the archaeological record of the period leading up to the crisis and to the content of the transformational solution reached and expressed in the corpus of Late Preclassic art. The Lowland Maya were village agriculturalists for more than a millennium before the Late Preclassic breakthrough. As demonstrated at Cuello

(Hammond 1979), these Maya had ritual centers; ritual activities, including human sacrifice; trade in exotic materials; and differentiated social status, as seen in burials. In short, the Lowland Maya prior to the breakthrough were well on their way toward becoming a complex society characterized by social inequality. In this respect, the Lowland Maya developmental trajectory corresponded to that of neighboring regions in southeastern Mesoamerica.

The Lowland Maya parted company significantly with their neighbors, however, in their manner of expressing religious sanction for hierarchical authority in public places. Present evidence suggests that virtually the entire mountainous crescent flanking the Lowlands was populated by peoples adopting from the Olmec civilization the symbolic religious means of reinforcing elitism. Traditionally, the absence of Olmec and Epi-Olmec material culture in the Maya Lowlands was explained by there having been an absence of people. We now know that people were there, and long-distance trade indicates that there was communication between highlands and lowlands. Rather than an Epi-Olmec complex in Middle Preclassic times, we have a complex of modeled figurines and a few examples of portable objects decorated with ambiguous symbols. On the one hand, Maya society has some kind of authority structure in place; on the other, this society has an aversion to broadly diffused available symbols used to reinforce elite authority. This paradox suggests that the Maya model of cultural reality prior to the breakthrough is fundamentally egalitarian, that it suppresses overt symbols of hierarchical authority, and that it relegates the elite to de facto status.

It is worth pointing out that the evidence for gradually increasing elitism in the nucleated village at Cerros prior to the breakthrough (Cliff 1982) shows that the focus for ritual activity and for the display of status differences was the household and the interior of the home. At Cuello also, the earliest ritual focus was the interior space of perishable structures (Hammond 1979). Embedding public ritual in homes or in buildings that replicated homes could have served to reinforce the "embeddedness" of the elite in the domestic imperatives of kinship and egalitarianism.

The social conditions in the Maya Lowlands that fueled elitism prior to the breakthrough were many and complex (Adams 1977b; Freidel 1979). Suffice it to say that the Lowland Maya were not in a position to isolate themselves from the rest of Mesoamerica, or to reverse strategies of production and trade, population growth, and other indigenous factors reinforcing the trend toward increased social complexity and inequality. In the face of these dynamic social conditions, an ideal of social equality became increasingly untenable and was finally transformed into a model of reality that made elitism both rational and necessary. The social result was the explosive release of energy invested in central places that celebrated the new order.

We can surmise the structure and content of the pre-threshold model of reality from the model that supplanted it. We argue that the central vision of the Classic-period Maya was their descent from Hero Twin brothers who had been apotheosized as

Venus and the Sun. This mythological twin complex is preserved in transformed version in the Quiche Maya *Popol Vuh*, wherein the twins are named Hunahpu (One-Blowgunner) and Xbalamque (Jaguar-Sun). In the Classic period, the twins are GI and GIII of the Palenque Triad of hero ancestors. GII, the third member of the Triad, is God K, the personified obsidian mirror of seers (Schele and J. H. Miller 1983:9–12) and the god particularly associated with the accession of rulers (Proskouriakoff 1973; Schele 1982), lineages, and auto-sacrifice (Schele 1976). Unlike GI and GIII, GII is never presented in human form, nor does he have youthful and aged aspects (Schele 1979c). In general, GII represents the blood bond between the Twins, a concept that will prove to be the central mystery of Maya religion. We have hypothesized that the original Late Preclassic program depicted on both Structure 5C–2nd at Cerros and Structure E–VII sub at Uaxactun shows Venus and the Sun, the ancestral Twins, as long-snouted saurian and blunt-snouted jaguarian entities, respectively. The Sun masks at Cerros emerge from, and descend into, a base line also manifested as a long-snouted beastie.

The twin ancestors provide a potent metaphor for lateral blood ties between lineages, communities, and peoples adhering to the same myth cycle. As twins are of the same womb and blood, so all Maya are of the same ancestry and blood. Brotherhood leads to egalitarian values and kinship sanctions. Although we have no imagery to confirm that the Twins provide the central mythological basis for the Maya model of reality prior to the Late Preclassic threshold, it can be documented that the basic jaguarian-saurian dyad is well established in Olmec and Epi-Olmec iconographic programs surrounding the Lowlands. Moreover, this is the central image that emerges regionally in the Lowlands at the time of the breakthrough.

Structurally, the twin concept expresses dual organization, mediated by divine blood. Duality remains a conceptual and visual organizing principle throughout the ensuing Classic period, expressed in such pervasive symbols as the serpent bar and the Celestial Monster. The hieratic focus of the Late Preclassic program on the Twins, and on supplementary dyads depicting their anthropomorphic and zoomorphic aspects, suggests that the twin concept was the linchpin in a chain of analogue dyads making up the threshold model of reality. If the twin concept expressed a statement of equality and equivalency, the entire chain would replicate this principle. Conversely, if the twin concept were transformed to display hierarchy, the rest of the model would take on this connotation.

The Maya succeeded, through the principle of time passage, in transforming the twin concept into a central image of hierarchy. As displayed on Structures 5C–2nd and E–VII sub, the Twins are in a hierarchical relative position, with GI/Venus above and GIII/Sun below. This positioning provides a celestially correct cosmic model, with Morning and Evening Star above the rising and setting Sun, and it displays a ranking based on the order in which the Twins were born: GI/Venus as firstborn and GIII/Sun as second-born. In the Classic transformation of this model, GII—the blood bond between the Twins, expressed in the divine blood of human rulers and auto-sacrifice—is the third-born of the Triad. By asserting that time had passed between the births of the Twins (this is given in the hieroglyphic texts at Palenque), the Maya displayed the principle of ranking—of inequality—in their central icon and concept.

The employment by the Maya of the principle of ranking was by no means mechanical—a simple assertion, for example, that the de facto elite were descendants of the firstborn, Venus, while the commoners were descended from the Sun. The Palenque genesis myth (Lounsbury 1976, 1980, 1985; Schele 1981) and Classic iconography in general lead us to believe that the royal families of the Maya claimed direct descent from both Twins. This would be possible only if the twins were viewed as bearing the relationship of parent to child, ascendant to descendant generations. The conflation of brother-brother with parent-child relations is a biological impossibility, a paradox analogous to the perceived condition that, while all Maya were brothers, the elite were distinct from the commoners.

In the *Popol Vuh*, the Hero Twins facilitate each other's reproduction not through biological means but through sacrifice. Both auto-sacrifice and death-dealing sacrifice were principal activities of Maya royalty during the Classic period (Schele 1984a; Stuart, this volume); in these contexts, personages regularly displayed the attributes of the Twins. We believe that the Twins bore the relationship of parent to child through sacrifice and the passing on of divine blood from ascendant to descendant generations. The Maya elite of the breakthrough asserted that they were the direct descendants of the Twins (while the commoners were of lateral lines), and that they were the living vessels of divine blood who reproduced themselves through sacrifice, as did their first ancestors. Significantly, Maya royalty functioned not only as executioners but also as the prime objects of sacrifice. In this manner, the elite served the common class as the central mediation between the natural and supernatural domains. The principle of ranking stated that as the firstborn was to the second-born, so the Twin ancestors were to the elite and the elite to the commoners. Through sacrifice, the elite reproduced the divine blood and maintained the living supernatural connection necessary to the reproduction of all Maya people and all living things within their domain. With the introduction of the time dimension, the Maya elite introduced the past into the future by means of sacrifice, but it was a past transformed by their own invention, and a future in large measure determined by it.

Aftermath of the First Transformation

If the Maya sanction of social inequality was temporal, it was also temporary. Almost immediately after the primary program, compositions displayed dyads with an anthropomorphic-zoomorphic contrast; the human side of the Twins was factored out to bring them into line with their living human agents. On Structure 29B at Cerros, Structure N9–56 at Lamanai, and Structure 34 at El Mirador, the human aspect of GIII, the jaguar, is displayed in the Late Preclassic period. But the Maya faced a problem of substantial proportions. Up to and through the first threshold, the elite remained anonymous and self-effacing. Many civilizations—Teotihuacan, for example—maintained self-effacing elites throughout their histories, but this mode was evidently unstable for the Maya. Several Late Preclassic centers collapsed, including Cerros and El Mirador. We deduce from the solution to this second crisis that the problem lay in the transmission of power within divine families of the elite. The solution, of course, was the singular focus on ruling individuals and their rites of passage and inheritance of divinity. The archaeological record of the Protoclassic remains scanty, and we do not yet understand the social conditions and the nature of the threshold that resulted in the Early Classic civilization in the Lowlands. Visually, the transformation involves new primary media—the stone stela, in particular, with its focus on the human agent frozen in ritual action, and decorated pyramids to form cosmic frames for such action. We have outlined some of the positional substitutions and inventions that occurred in this transformation. In general, we believe that this transformation involved qualification of the central Hero Twin concept of hierarchy by means of supplementary analogue dyads—for example, the Celestial Monster as an analogue to the double-headed sky-frame serpent—rather than the invention of a new central axiom.

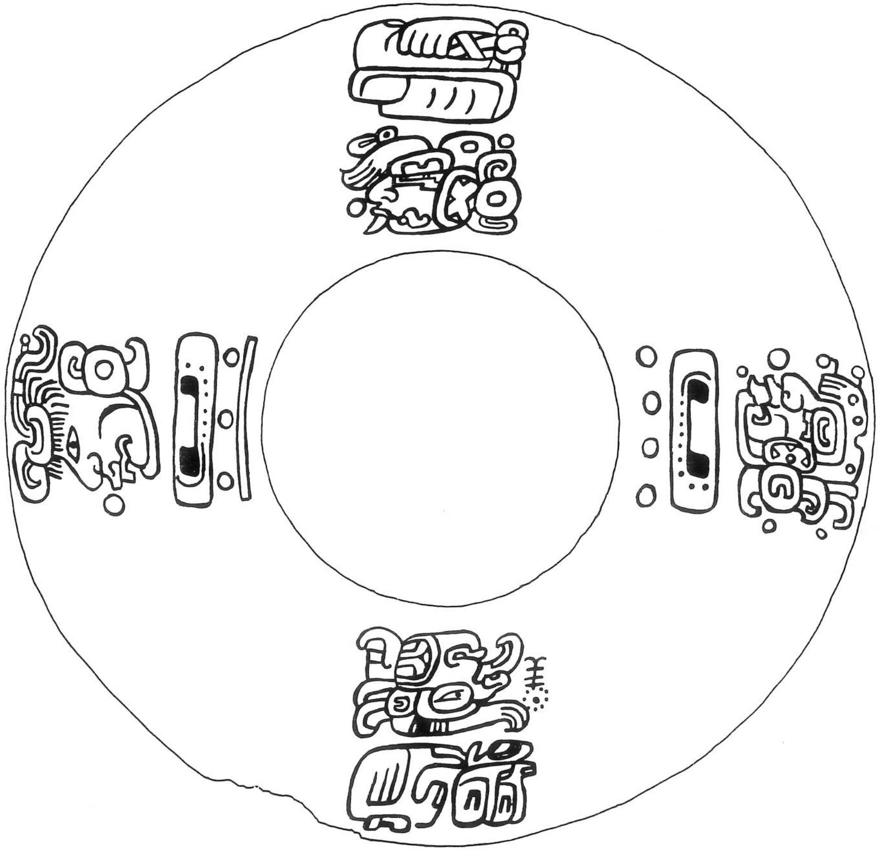
Evolutionary Implications

Our preliminary sketch for a theoretical and methodological framework in which the Maya evolutionary trajectory might be explained is crude and speculative. It attempts, nevertheless, to account for a very real phenomenon in ancient civilization: episodes of rapid change, toward both increased and lessened complexity. We feel that such disjunctive episodes cannot be explained exclusively by changes in social conditions or in the material logistics of social life. The cultures of complex societies must be dynamic, and episodic change in society should have its counterpart in cultural reality. Complex societies display their visions of reality in material symbols; symbol systems can be analyzed and correlated with social change. We believe that the dynamics of social change and cultural change are distinct, the former changing through cumulative causation (Flannery 1972), the latter through structural transformation. These distinct dynamics lead, in our view, to a dialectical rather than a mechanical relationship between culture and society. We hypothesize that this dialectical confrontation between cultural models and social conditions in complex societies contributes significantly to the occurrence of recorded disjunctive episodes. Only further research can determine the ultimate validity or invalidity of our approach. If we are proven correct in the long run, the implications for the future of civilization should be clearly reflected in its past.

3

JOHN S. JUSTESON,
WILLIAM M. NORMAN,
AND
NORMAN HAMMOND

The Pomona Flare: A Preclassic Maya Hieroglyphic Text



3.1 The Pomona flare bears a Preclassic text in a Yucatecan language. It contains the earliest dated Maya references to rituals of rulership. (Drawing by John S. Justeson.)

The Pomona jade flare (fig. 3.1) has been singled out by J. A. Graham (1971:136) as bearing possibly "the most significant example of PreClassic Lowland Maya writing now known to us"; this paper substantiates his assessment and specifies the significance of the flare for several aspects of the emerging picture of Preclassic Lowland Maya civilization. Graham's was the first suggestion that the flare antedates the Early Classic, a suggestion that has not been accepted subsequently (e.g., by Prem 1971a:130). We demonstrate that it dates to no later than ca. A.D. 250, that is, to the Terminal Late Preclassic or earlier; it carries one of the earliest securely dated texts in a definitely Lowland Maya hieroglyphic script.

Our analysis of the text concentrates on its syntactic structure. This is partly a methodological exercise; it illustrates how syntactically controlled investigation of a hieroglyphic text can assist its interpretation. Substantively, the syntactic structure recovered reflects the identity of the language in which the text was written (an early form of Yucatecan), secures aspects of Mayan linguistic chronology, and bears on the history of Cholan–Yucatecan interaction in the development of Lowland Maya civilization during Preclassic times. The written text fails to represent certain grammatically required inflectional affixes, indicating that Preclassic Lowland Mayan hieroglyphic writing made use of representational principles more primitive than those of the Classic script; these principles of Preclassic writing suggest features of the evolution of grammatical representation in Mayan that are important for our understanding of the early evolution of writing systems. Finally, the syntactic results help us to determine the approximate meaning of the text.[1]

This inscribed jadeite flare was found, along with other artifacts, in an early tomb at Pomona, Belize (fig. 3.1).

> We believe this to be the largest flare (i.e. forward-facing element of an earplug assemblage) found to date in Mesoamerica. Its great size (diam. averages 18 cm.) renders it probable that it adorned a mask-headdress or perhaps a wooden statue, rather than that it was worn in the ear. It is of highly polished dark green jadeite, with lighter mottlings. Edge of face and of stem cut squarely across. On either side of the stem is a conically drilled perforation 5-6 mm. in diam. on

---

[1] This paper represents Mayan sounds via standard linguistic symbols rather than via the "traditional" orthography based on Colonial Yucatec practice. In particular, we use: *k* and *k'* for plain and glottalized *k*, respectively, not *c* and *k*; our *x* is as in Spanish *j*, not English *sh*; our *h* is as in English *h*, not Spanish *j*; and for English *sh* we use *š*, not *x*. *č* is used for Colonial *ch*, ¢ is used for Colonial *tz*, and ' is used after the symbol for a plain consonant to indicate its glottalized counterpart. ʔ denotes a glottal stop, sometimes represented word-initially or after vowels by ' in other orthographies.

Abbreviations: pCh = proto-Cholan; pCT = proto-Cholan–Tzeltalan; pM = proto-Mayan; pMm = proto-Mamean; pTz = proto-Tzeltalan; pYu = proto-Yucatecan.

Language group designations: Lowland Mayan = Cholan + Yucatecan; Greater Lowland Mayan = Cholan-Tzeltalan + Yucatecan.

> exterior, 4 mm. on interior. The central perforation was evidently drilled, as it is perfectly circular (diam. 7.9 cm.), the tool used having doubtless been a large hollow drill. On the back are five straight marks of a sawing tool, used vertically for the preliminary blocking out of the stem. The four glyphs on the face were incised with a sharp implement that produced smooth lines slightly less than .5 mm. wide. (Kidder and Ekholm 1951:130–131)

Scant attention has since been accorded either the flare or its archaeological context (but see Adams 1971:147; Lincoln 1985). The only published discussion of the meaning of its text is Adrian Digby's (1964:19) pessimistic summation.

> Partly no doubt owing to the archaic form of the glyphs, and partly because of the difficulty in knowing where to start, and indeed in what order to read the glyphs, the inscription has so far defied interpretation. We can be reasonably certain that it is astronomical or calendrical.

The Age of the Flare

Stylistic Evidence

Discussion of the age of the flare began with Kidder and Ekholm's (1951:131) brief report: "J.E.S. Thompson states that these glyphs are undoubtedly early." They suggest an Early Classic date, based on a basal-flanged bowl accompanying the burial (ibid.:129). Digby (1964:19) and J. A. Graham (1971:136) associate the style of the script with that on the Leiden Plaque (8.14.3.1.12), ca. A.D. 320. This led Digby to conclude that the text is "of a very early date"; Graham suggests, more specifically, a Preclassic date.

Thompson's rather vague summation from nearly four decades ago still represents the state of knowledge on the issue; Prem (1971a:130), for example, regarded a Late Preclassic dating of the flare as so uncertain that he did not discuss it in his studies (1971a, 1971b) of Late Preclassic Mesoamerican writing. Elements of glyphic style securely place the text in the first half of the Early Classic or earlier. Most diagnostic is the U element infixed to certain signs, rather than the circle of later Early Classic and Late Classic examples; this U element appears also in other Late Preclassic Maya texts and in the Late Preclassic sculpture of the Greater Izapan area (the Guatemalan Highlands and adjacent Pacific coastal areas of Chiapas, Guatemala, and El Salvador). In addition, certain elements serving as signs or parts of signs on the flare appear stylistically similar to both early Early Classic and Terminal Preclassic glyphic and iconographic elements. On the other hand, there are no sign forms on the text that can be equated with exclusively Late Preclassic iconography, and a Preclassic date for the flare is not secured by the conformity of its glyphic style with that of the early Early Classic text of the Leiden Plaque.

Any more specific stylistic assessments of the date of the text would be speculative. No legible texts have been recovered scientifically from Lowland Maya sites in contexts requiring their assignment to the Late Preclassic.[2] A small number of legible texts from the general Maya–Izapan tradition can be attributed to the Late Preclassic on archaeological or iconographic grounds: the text on a stone bowl, probably from the Miraflores phase at Kaminaljuyu (M. D. Coe 1973:26); an incised text flanking an Izapan-style figure on the back of a stone Epi-Olmec were-jaguar pectoral (M. D. Coe 1966); and the text on the back of an Izapan-style were-jaguar statuette (M. D. Coe 1973:24). In none of these texts do we recognize specific resemblances to the Pomona flare inscription, apart from those features shared with Early Classic Lowland Maya texts.

There are specific resemblances to a text from the Cenote of Sacrifice at Chichen Itza (Proskouriakoff 1974:204, fig. 12,l).

> The closest analogue to its style is that of the inscription of the well-known jade flare from Pomona, British Honduras (Kidder and Ekholm 1951, figs.2,3), which was found with pottery best ascribed to the beginning of the Early Classic period. The scraping down of small areas that normally would be hatched or left plain, the distortion of the mouth, suggesting buccal masks, and especially the rendering of the eyes, which are lozenge-shaped with a small pit in the center, like those of the bib-and-helmet style, are characteristic of both inscriptions.

The text from the Cenote of Sacrifice is probably Late Preclassic; its fifth sign (fig. 3.11d) is equatable with icons on Preclassic Greater Izapan and Lowland Maya monuments. But the stylistic similarities between the two texts do not secure a Preclassic date for the flare; rarely attested features are not reliable indices of chronology. Even if these similarities reflect essentially Preclassic traditions, a very late Terminal Preclassic assignment for the Cenote text would not preclude a very early Early Classic assignment for the text of the flare. Indeed, the Cenote jade sign mentioned above is found on the San Diego cliff carving (fig. 3.11e), which may be Early Classic. Furthermore, since some stylistic innovations in Maya art took place at different times in different media (Proskouriakoff 1965:475), aspects of Late Preclassic iconography may have survived into Early Classic hieroglyphic writing. Most of the signs in the brief Pomona inscription are definitely, and others are probably, identifiable with later Maya glyphs; particularly striking is the rare T673[552].60 compound (fig. 3.20a, b). As far as hieroglyphic style is concerned, the flare inscription could be a Preclassic text with Early Classic echoes or an Early Classic text with Preclassic precursors.

---

[2] A recently discovered, early Late Preclassic, inscribed sherd from El Mirador is interpreted by Dorie Reents as the sign T533 for **a·xa·w*, 'lord,' and by Mathews as the T535 "male parent indicator" (Jones 1977; Schele, Mathews, and Lounsbury 1977). Neither identification is secure; the curling element at its sides makes it resemble the snout of a reptilian creature more closely than it resembles either sign, and Stephen Houston (personal communication, 1983) points to iconographic parallels in Late Preclassic Greater Izapan sculpture.

Archaeological Evidence

The archaeological dating of the flare depends on its stratigraphic context and associations. These not only confirm its general temporal assignment to the Late Preclassic or Early Classic but also place it more specifically before ca. A.D. 250.

The flare was found in 1949 during the bulldozing of a mound on the Pomona citrus estate, in the North Stann Creek Valley of central Belize. The find was reported in 1950 by Alfred P. Bellhouse and Harry D. Anderson of the Pomona estate to Alfred V. Kidder and Gordon F. Ekholm, who were visiting the area. A fairly precise statement on the circumstances of the find was recorded (Kidder and Ekholm 1951:125–126). According to Bellhouse and Anderson, the mound had been ca. 9m high and 27m in diameter. The bulldozer cut revealed five plaster floors. The lowest was the floor of a tall tomb chamber, designated Tomb I. This tomb was built of limestone that presumably was derived from the foothills of the Maya Mountains to the west. In plan, it was ca. 4.5m by 1.2m. Its height of 2.1m was sufficient for the chamber to have been initially a building, reused for burial; this suggests that the chamber floor may actually have been the top surface of a low platform predating construction of the chamber. Another, smaller tomb found higher up in the mound, in uncertain stratigraphic context vis-à-vis the floor sequence, was designated Tomb II.

Tomb I contained a large number of jade, shell, and pottery objects; Tomb II contained primarily jade, in small quantities. Unfortunately, there is now some controversy over which objects came from Tomb I and which came from Tomb II, because of discrepancies between the accounts given by Bellhouse and Anderson in 1950 and that given by Samuel Gammon to Elizabeth Graham (1982:193–196) in 1975. The only chronologically relevant points of difference concern the large inscribed ear-flare; two other ear-flares of normal size with scalloped edges; and four small, jade human figures pierced through the neck for use as pendants.

Our description here of the further contents of the tombs follows the earlier report, which appears to be the more credible (as will be seen below). The jades from Tomb I included two ridged beads, sixty-nine subspherical beads, eight minute beads, one tubular bead, one pendant, and one fragment, possibly of inlay; none of the beads is of a chronologically diagnostic form. Shell objects included two openwork ear-flares, tubular ridged and plain beads, spherical beads, and two carved valves (plus seven fragments of plain valves) of *Spondylus americanus*. Six baroque pearls, nine stingray spines, a hematite disc, two chert blades, and one obsidian blade completed the inventory of small objects. Finally, the report noted the remains of ten complete or fragmentary pottery vessels, all monochrome red or unslipped, except for fragments of two mammiform tetrapodal bowls; one of the latter had an estimated diameter of 21cm and a red-and-black-on-orange ornament, the other an estimated diameter of 32cm and dark-red-on-red-brown painting.

The contents of Tomb II, according to Kidder and Ekholm (1951:128), consisted of an axe of blue jade, an axe of ''granite'' (certainly a metamorphic granular rock), six tubular beads of jade, and an ear-flare-like plug decorated with excised opposed triangles. This plug (ibid.:fig. 4f) is the only object definitely to have come from Tomb II that will concern us further (see below); the other objects are of no chronologically diagnostic value, although the discovery of a blue jade axe of high quality at this relatively late date and eastern location is of general interest.

In their report to Kidder and Ekholm shortly after the discovery, Bellhouse and Anderson stated that the inscribed ear-flare, the two smaller scalloped ear-flares, and the four jade figures were found in Tomb I. Bellhouse and Anderson apparently had been swiftly summoned to the site of the excavation, but it is not clear whether either had been an eyewitness to the discovery of the large flare (Gordon Ekholm, personal communication); still, they were able to report its archaeological context with precision. They described four round, limestone slabs resting on the pink plaster floor of Tomb I: one in the center of the chamber, one in the center near its south end, and two near the north end; they stated that the flare was found standing on edge between the two central slabs. These interlocking details lend credence to their account of the discovery. Further circumstantial evidence supporting this account comes from correspondence of Alfred Kidder, provided us by his grandson, Tristram Kidder. Among these papers was the rough draft of a letter to the governor of British Honduras, dated 21 February 1950, written by Kidder on the yacht on which he and Ekholm were traveling while exploring the region.

> The Pomona specimens consist of two lots. That from the small tomb found first has already been sent to the Museum in Belize; the second, from a larger tomb, has been brought in by us. A list of its contents follows.[3]

The appended list placed the jade flare, along with the smaller jade earplugs and the four jade figurines, in the second lot. The fact that the material recovered had been separated into two lots, one (said to be from Tomb II) sent to Belize City seemingly before Kidder and Ekholm arrived, and another (said to be from Tomb I) sent in by Kidder and Ekholm themselves, indicates that the jade flare was discovered later than the material assigned to Tomb II. This evidence suggests that the flare was from Tomb I, as all contemporaneous testimony states.

[3] Kidder's rough draft shows grammatical revisions designed to make the letter address ''specimens'' rather than ''lots.'' The revisions thereby were more ambiguous in dealing with lots than was the earlier version cited in the text, but they are consistent with the meaning expressed originally. The latest version states: ''The Pomona specimens consist of two lots. We believe them to date from the earlier part of the Maya Old Empire, about the 6th or 7th Century A.D. Those from the small tomb first found has [sic] already been sent to the Museum in Belize; those from the second tomb were brought in by us. A list of them is appended.''

In 1975, however, Samuel Gammon reported to Elizabeth Graham that he had witnessed the excavation of Tomb II, high up in the mound, but not that of Tomb I; his recollection was that the large flare, the smaller, scalloped flares, and the four jade figures had been found in Tomb II. Gammon, who had been located by Graham, was one of the original participants in the construction work that led to the discovery of the Pomona tombs in 1949. We discount neither Gammon's story nor Graham's experience of his general reliability as an informant; however, the detailed account of Bellhouse and Anderson, recorded fairly soon after the discovery, seems, on balance, preferable to that remembered and recorded twenty-six years later.

Two consistent aspects of these discrepant accounts have important chronological implications: (1) all pottery vessels recovered from the excavations were found in Tomb I, and (2) whether in Tomb I or II, the large flare was associated with the smaller flares and with the four jade figures. Since the pottery offers the best opportunity to provide a reliable date for the deposition of the associated assemblage, the date of Tomb I can be determined more exactly than can that of Tomb II. The date of the flare can be ascertained fairly narrowly, regardless of which report is correct, based on the ceramics of Tomb I and on external parallels for the jade assemblages.

POTTERY VESSELS FROM POMONA TOMB I (FIGS. 3.2–3.4)

The finds were split into two groups. The jades and carved shells, the shell beads, and the other small objects were sent by the government of British Honduras (as Belize was until 1973) to the British Museum for safekeeping until the objects could be safely displayed in the colony; this group included the entire contents of Tomb II, by either account. The pottery vessels and uncarved *Spondylus* shells were taken by Kidder and Ekholm to the United States, where the vessels were restored and drawn. The vessels, still the property of the government of Belize, are presently in the care of the Department of Anthropology of the American Museum of Natural History in New York. The collection is now numbered 1 through 16, although no. 12 could not recently be located; no. 3 is in the standing exhibit of the Museum's Middle American hall. The inventory of vessels now in New York is as follows.

No. 1 (figs. 3.2-1, 3.4d). Jar with high outcurving neck and slightly externally bolstered rim, diameter 11cm (Kidder and Ekholm 1951:fig. 7d); low ring base and single preslip groove around the base of the neck. The paste is pale and pinkish-buff with medium tempering; its flaky, dull-red slip (Dark Red 2.5YR 3/1) exhibits slight rootlet marking and crackling in places. Comparison with a sample of Barton Ramie sherds (used as the nearest well-documented ceramic sequence spanning the Late Preclassic and Early Classic time periods, and kindly lent by Muriel Kirkpatrick from the type collection at Temple University) indicated that the slip was close in shape and dullness to Bullet Tree Red, with some resemblance in paste color; the Bullet Tree Red slip was equally thin but less flaky (B.R. reference #21324). A sherd of Quacco Creek Red (#21326) showed a similar bolstered rim and a similarly thin, flaky slip of a different shade. Both comparanda form part of the Mount Hope Ceramic Complex at Barton Ramie (Late Preclassic); none of the Floral Park (Protoclassic) or Hermitage (Early Classic) complex types bore close resemblance to the Pomona vessel. The vessel form is found both in the terminal part of the Late Preclassic and in the initial Early Classic at other sites in Belize.

No. 2 (figs. 3.2-2, 3.4b). Bowl with medial Z-angle and low ring base, rim slightly expanded, diameter 36cm (Kidder and Ekholm 1951:fig. 7b); two parallel circumferential preslip grooves in the re-entrant angle above the Z-angle. Fabric, slip, and flaking are similar to those of no. 1; the vessel is assignable to the same type. The interior is several shades darker than the exterior, with several areas of black (not fire-clouding). No rootlet marks or crackling are present.

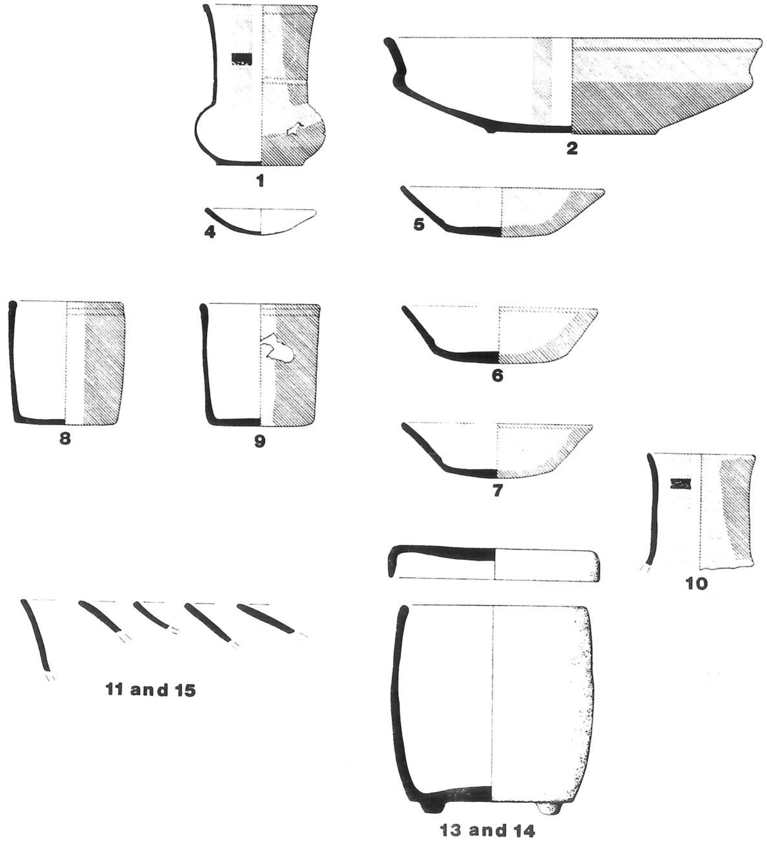
No. 3 (fig. 3.4a). Bowl with medial flange and low ring base, diameter 32cm (ibid.:fig. 7a). This is the vessel described as a "basal-flanged bowl" by Kidder and Ekholm (ibid.:129), but the flange is both higher and more horizontal than the characteristic basal flanges of the Protoclassic and Early Classic periods. Although the vessel could not be handled because of its position in the permanent display, observation through the case suggested that the dark red slip was similar in dullness to the slips of nos. 1 and 2, but no detailed comparison with sherd material or observation of fabric was possible.

No. 4 (figs. 3.2-4, 3.4e). Small, shallow, unslipped bowl of hemispherical profile, diameter 11cm (ibid.:fig. 7e).

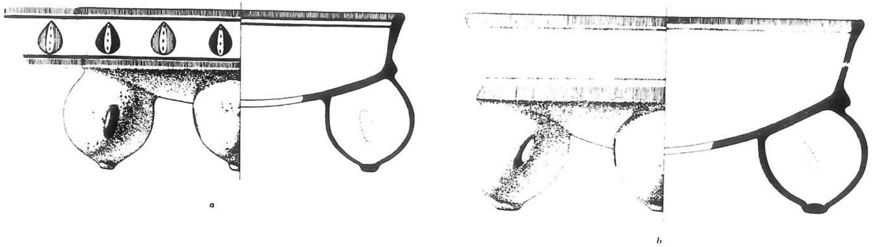
Nos. 5 and 6 (figs. 3.2-5, 2-6, 3.4c). Two flaring-sided, flat-based bowls, diameters 20.3cm and 19.5cm, respectively, of very coarse-gritted paste with an uneven undulating surface. The slip, broken in many places by grains of temper, is dull red-brown (Red 5YR 4/8). No. 5 has a small interior fire-clouded area (ibid.:fig. 7c).

No. 7 (fig. 3.2-7). Fragment of a similar vessel.

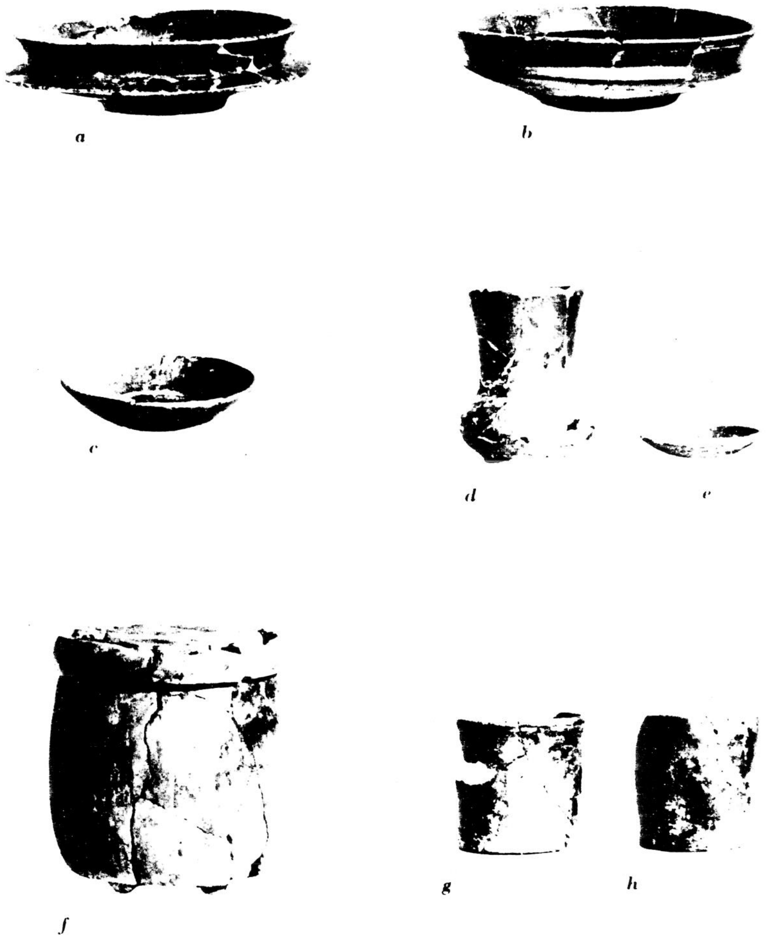
Nos. 8 and 9 (figs. 3.2-8, 2-9, 3.4g, h). Two cylindrical vases, height 12cm and diameter 11cm, with slightly rolled rims, of the same very coarse paste and with the same irregular surface as nos. 5–7. Some fire-clouding (ibid.:fig. 7g, h).



3.2 Profiles of pottery vessels from Tomb I, Pomona, Belize. Numerals are keyed to the vessel numbers cited in the text; vessels 3 and 12 were not available for drawing. (Drawings by Edward R. Gimmi, Jr. 1/4 scale.)



3.3 Mammiform tripod vessels from Pomona Tomb I. a. Vessel 12 or 17. b. Vessel 16. (After Kidder and Ekholm 1951:fig.8.)



3.4 Restored vessels from Pomona Tomb I. a. Vessel 3. b. Vessel 2. c. Vessel 5. d. Vessel 1. e. Vessel 4. f. Vessels 13 and 14. g. Vessel 9. h. Vessel 8. (After Kidder and Ekholm 1951:fig. 7.)

NO. 10 (fig. 3.2-10). Fragment of a high-necked jar, similar to no. 1 and of the same paste and slip as nos. 1 and 2. The neck is 10.5cm high from the body angle, with an outcurved lip, a rim diameter of 9cm, and a black band on the interior.

NOS. 11 AND 15 (figs. 3.2-11, 2-15). Sherds, unrestored, from assorted, well-made, but very coarsely tempered bowls, with thinnish red slip and squared rims. Several different vessels are represented by one or a few sherds of each.

NO. 12. Not available.

NOS. 13 AND 14 (figs. 3.2-13, 2-14, 3.4f). Barrel-shaped jar and lid, height 20cm, diameter of jar rim 18cm, diameter of lid 21cm. Of unslipped, smoothed, medium-tempered fabric; fired pink throughout. The jar has four nubbin feet (ibid.: fig. 7f).

NO. 16 (fig. 3.3b). Sherds of an unrestored Z-angle bowl with four mammiform supports (ibid.: fig. 8b). The pinkish fabric is close to that of the Aguacatec variety of Aguacate Orange, in the Floral Park complex at Barton Ramie. The Z-angle has a band of dark purplish-red paint, with another band on the interior of the rim. The color, when dark, matches the band on no. 10. The reconstructed diameter is 32cm. No fragments of the second mammiform tetrapod published by Kidder and Ekholm (ibid.: fig. 8a) were available for study. From the drawing therein, it can be seen to have a form similar to that of no. 16, but with rather more elaborate decoration of pointed ellipses around the wall.

Of the sixteen or seventeen vessels now known to have been present in Tomb I (the missing mammiform tetrapod may have been the unavailable no. 12 or a no. 17 [fig. 3.3a]), the majority either are made of a very coarse fabric with large grits poking through the slip (nos. 5–9, 11, and 15) or are unslipped (nos. 4, 13, and 14). Only nos. 1–3, 10, 16, and the missing second mammiform tetrapod (no. 12?) are comparable, in any chronologically useful way, to ceramics from other sites. Apart from the specific resemblances to Bullet Tree Red and Quacco Creek Red at Barton Ramie, the general temporal position of the vessel forms fits best into the terminal portion of the Late Preclassic—the second and early third centuries A.D.—although a slightly earlier date would be equally possible. Such attributes as the ring base, tall outcurving jar neck, medial flange, and medial Z angle are all found in this period in northern Belize, while innovation in ceramics is seen as early as A.D. 100 at Cuello, in the cache below Stela 1 (Hammond 1982), with the inception of trichrome decoration. The dull slip on nos. 1, 2, and 10 (and probably on no. 3) lies still within the Chicanel waxy-ware technology and may be close to the "hard and relatively matt" slip noted by Pring (1977:144) on four vessels from Structure 277 at Nohmul; it is not among the gloss slips that appear in the late facet of the Freshwater Floral Park ceramic complex at Nohmul (ibid.). The two mammiform tetrapod bowls with their dichrome and trichrome decoration also would fit well into this period, which (whether or not one subscribes to the model of a separate "Protoclassic") is that of the terminal Preclassic in the first few centuries A.D. The ceramic evidence from Tomb I thus places its assemblage—including the large ear-flare, if one accepts the Bellhouse-Anderson account of its context—firmly in the latter part of the Late Preclassic.

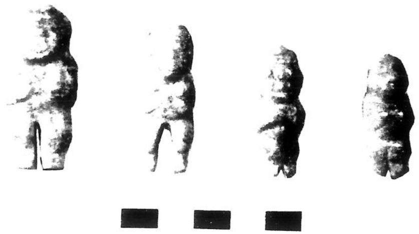
The undiagnostic vessels show no attributes countering this assessment: the flat-based, flaring-walled bowls, nos. 5–7, are of a form present in finer fabrics from the Late Preclassic into the Early Classic. More than 150 such vessels have been found in Late Preclassic contexts at Cuello, in northern Belize; again, the terminal portion of the period seems to be involved. E. Graham (1982:193–196) has reached a similar conclusion regarding the dating of the Tomb I pottery, on the basis of her excavations at Colson Point, a site on the coast 14km northeast of Pomona.

THE POMONA JADES

If the inscribed flare comes from Tomb I, the discussion above establishes that it was deposited in the second half of the Late Preclassic, between ca. A.D. 1 and 250. Even if the flare comes from Tomb II, as Gammon stated, it can still be placed in the Late Preclassic on the basis of the chronologically diagnostic jades associated with it in both Gammon's and Bellhouse and Anderson's reports.

Among the jade artifacts, only the scalloped ear-flares (Kidder and Ekholm 1951:fig. 4i, j) and the four small figures (ibid.:fig. 4b–e) from Tomb I are chronologically diagnostic, since both subspherical and tubular beads are known from the Late Preclassic period through the Late Classic period. Scalloped ear-flares have been found at several sites in the northern half of Belize. At Altun Ha, in Tomb A1/1, of ca. A.D. 550, a very fine pair bore a hieroglyphic inscription (Mathews 1979b; Pendergast 1979:fig. 18d, e). Two earlier pairs, with the scalloping more deeply excised, were found in the dedicatory caches of Late Preclassic pyramids at Nohmul and Cerros. The Nohmul pair was found in Structure 110 (Hammond 1974:fig. 7; Wilk, Pring, and Hammond 1975:fig. 3.13), the Cerros pair in the top of Structure 6B (Freidel 1979). Thus, such scalloped flares were made from at least the latter half of the Late Preclassic through the latter part of the Early Classic; they neither preclude nor establish a Late Preclassic date for the Pomona flare.

The four small, jade human figures (fig. 3.5) are unique (as figures), to the best of our knowledge; however, their heads are miniature versions of the "bib-and-helmet"



3.5 Four small, jade, "bib-and-helmet" figurines from Pomona Tomb I. (Courtesy of the Trustees of the British Museum. Photograph by Norman Hammond.)

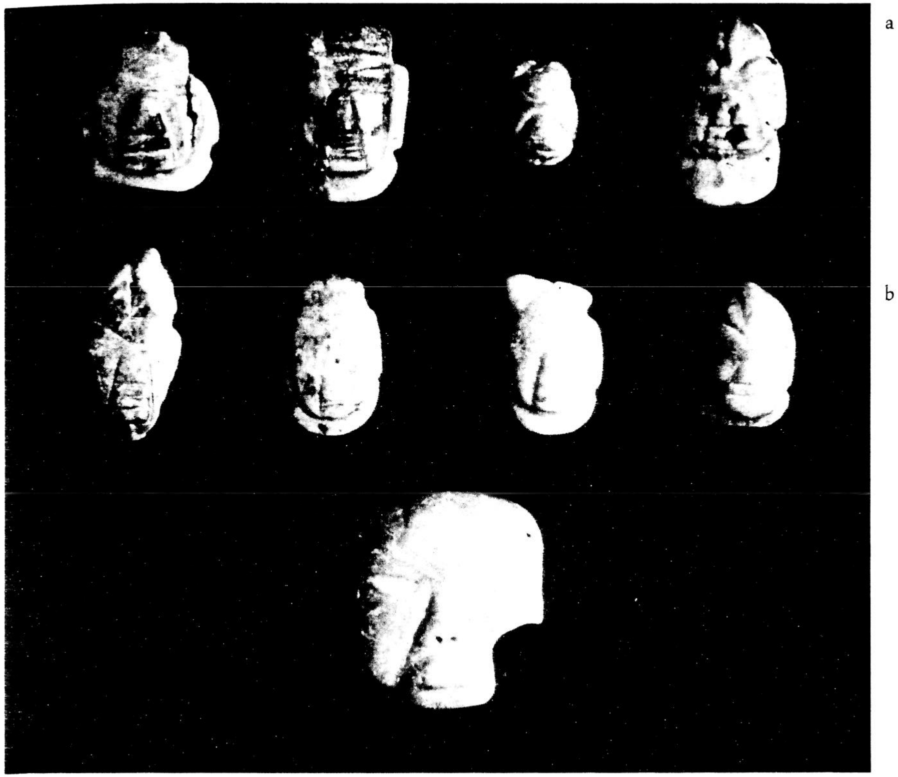
pendant form, described by Proskouriakoff (1974:96-97, pl. 53a), from the Sacred Cenote at Chichen Itza. Proskouriakoff (ibid.:97) puts this style back to Late Preclassic times.

> One of the pieces . . . was found imbedded in a ball of copal, suggesting that it was deposited in the Cenote after the fall of Chichen Itza. A rather similar piece but of different material was found at the site of Mayapan (Proskouriakoff 1962, fig. 25b), again pointing to late associations. Nevertheless, at Tikal this style has been found in association with Tzakol III remains, and I am inclined to trust my impression of even greater antiquity for this group of carvings. The helmetlike headdresses, the long plain ears, and the combination of fine incision and carving all hint of a remote connection with the ancient Olmec culture of Veracruz and Tabasco. Easby and Scott (1970, no. 71) identify with the bib-and-helmet style a pendant of shell found with terminal Preclassic vessels in [Isla,] Tabasco (Stirling 1957[:232], pl. 65[a, c]), thus confirming a Preclassic date for this style.

This Late Preclassic dating finds further confirmation in the presence of two sets of four bib-and-helmet pendants (fig. 3.6) in the Late Preclassic dedicatory caches from Nohmul Structure 110 and Cerros Structure 6B. The bib-and-helmet pendant may be a strictly Late Preclassic artifact, since the Tzakol 3 and Late Postclassic examples noted by Proskouriakoff, and another found in an Early Classic context at Tancah by A. G. Miller (1982:23, fig. 32), could have been heirlooms or archaeological finds before their deposition. In any case, the only two known assemblages of four jade heads of bib-and-helmet type (apart from that at Pomona, where stylized bodies are attached) are placed firmly in the Late Preclassic. These two instances agree even to the specific subtype of the bib-and-helmet style. Two heads in each are of what we here designate type A, one is of type B, and one is of type C.

The Nohmul and Cerros caches are worth examining in their entirety, since they display further parallels with the Pomona assemblage (Table 3.1). Both caches contain pottery vessels of Late Preclassic types (monochrome red in finish in almost all cases), although of varying forms. Both contain uncarved valves of *Spondylus americanus*. Both contain soft limestone slabs shaped like *metates*, which may parallel the four round slabs of soft limestone at Pomona (since the latter are lost, the point will remain moot). The Cerros cache had a large jade object, a mask carved on a slice off the edge of a jade boulder (Freidel 1979:fig. 9), which was found at the center of the cross formed by the four bib heads. The Pomona flare, which was also centrally located within its chamber, might be seen as the equivalent of this large, central object at Cerros; the Nohmul cache had no such large piece. Both the Nohmul and Cerros caches contained at least one jade bead, although not the large numbers found at Pomona.

Overall, the structures and and contents of the three deposits are strikingly simi-



3.6 "Bib-and-helmet" heads from dedicatory caches of Preclassic pyramids in northern Belize. a. Nohmul Structure 110. b. Cerros Structure 6B. (Photograph by Norman Hammond.)

lar (Table 3.1). Where the Pomona inventory differs most from those of the two north Belizean sites is in the sheer number of its jade beads and *Spondylus* valves, and in its larger number of pottery vessels. Pomona is the only one of the three deposits to have mammiform tetrapod bowls, but these vessels and some of the monochrome ones can be matched in general terms by the substantial collection from Nohmul Structure 277, a Late Preclassic building about .5km from Structure 110.

The similarities among these three assemblages suggest that, even if the bib-and-helmet style genuinely extended beyond the Late Preclassic into the Early Classic or even later, its appearance as part of this sort of assemblage is unique to the Late Preclassic (and to Belize). These parallels adequately demonstrate that the Pomona assemblage of which the large inscribed flare was a part was most likely deposited in the Late

Table 3.1 Agreement among assemblages containing jades comparable to the Pomona jade figures.*

	Late Preclassic pottery	Quadruple jade heads	Scalloped ear-flares	Worked limestone slabs	*Spondylus* shells	Large central jade object	Jade bead(s)
Pomona	+ (−)	+	+	+ (?)	+ (?)	+	+
Cerros	+	+	+	+	+	+	+
Nohmul	+	+	+	+	+	−	+

* The original, circumstantially preferred account, by Bellhouse and Anderson, provides the main entries. Where there is no value given parenthetically, Gammon's 1975 account is in accord with Bellhouse and Anderson's. Parenthetical values are based on Gammon's account where it disagrees with Bellhouse and Anderson's.

Preclassic period. They also provide further evidence that the original account was correct and that Gammon was mistaken in his later recollections. The pottery, and perhaps the *Spondylus* shells and limestone slabs (which Gammon did not mention), are missing from the Pomona assemblage if it is from Tomb II, while nothing is missing if the assemblage is from Tomb I. In addition, the central location attributed to the large inscribed flare agrees with the Bellhouse-Anderson account.

If the inscribed jade flare is from Tomb II, the evidence of the bib-and-helmet figures and the general similarity of the assemblage of which it is a part to those at the other sites show that this tomb also is Late Preclassic. Other evidence presented by Bellhouse and Anderson to Kidder and Ekholm is consistent with this chronological position for Tomb II: its small jade plug with excised opposing triangle decoration is most closely matched by a pottery potstand with similar decoration from Chultun C at Tzimin Kax, which is part of a terminal Late Preclassic deposit (Thompson 1931:pl. 42). Furthermore, if Tomb II is Late Preclassic, it must be from the second half of that period, since the earlier Tomb I is from the second half of the Late Preclassic.

If the flare and associated jades are from Tomb I, as appears more likely, we have no compelling evidence for the antiquity of Tomb II; in this case, the evidence of the jades reinforces that of the pottery in establishing the Late Preclassic as the era in which the chamber that became Tomb I was used for a magnificent burial, and thus as the era in which the inscribed flare was deposited.

We conclude that the great inscribed flare from Pomona was deposited during the second half of the Late Preclassic, most likely between A.D. 1 and 250. As John Graham has previously surmised, it is one of the most ancient Mayan hieroglyphic texts now known to us.

ANALYSIS OF TEXT

The text of the Pomona flare offers several obstacles to the traditional approaches to interpretation of Mayan hieroglyphic texts: (1) written in a continuous circle, its beginning and end are not overtly marked; (2) it lacks any dates or time counts, the basic cues upon which epigraphers have relied in delimiting sentence and clause boundaries; and (3) the script is of such antiquity that its relationship to the language it represents may be more primitive than that in the Classic texts to which we have become accustomed. Contrary to Digby's opinion (1964:19), most of the signs in this text are readily identified with their Classic descendants; use of these epigraphically defensible identifications of signs and compounds is crucial to the considerations that follow. But, to overcome the special difficulties of this early text, we are forced to adopt a grammatical approach; we attempt an exhaustive analysis of the possible syntactic structures of the text in terms of the characteristics of the syntax of those Mayan languages whose ancestors were written in hieroglyphic texts.

We assume that the inscription on the flare represents a grammatically well-formed text in a Mayan language. If this is so, the hieroglyphic text should conform to the syntactic rules of the language in which it was written. That language, we assume, belonged to either the Cholan-Tzeltalan or Yucatecan subgroup of the Mayan family, for these are the languages in which Classic Maya hieroglyphic texts were written (Thompson 1950:6, 27 and fig. 1, 1972:30–31; Fox and Justeson 1982; Justeson and Campbell 1981), and they were probably the only Mayan languages written in hieroglyphs in Preclassic times (ibid.:sec. 4.1). The syntactic rules of these groups are thus the most relevant, especially those rules whose antiquity is assured by their occurrence throughout the Mayan language family. We further assume that, in some cases, if the meaning of a glyphic sign or compound is known, it can be used to ascertain the part of speech that the sign or compound represents; for example, compounds denoting persons or deities stand for nouns.

Rules of the hieroglyphic orthography introduce two potential complications. First, the grammatically well-formed language text may not have been represented completely in script, for not all required grammatical morphemes are indicated in later Mayan inscriptions: obligatory numeral classifiers are infrequently represented (Thompson 1950:55–56), aspect prefixes are represented so rarely that their appearance has yet to be established, and there is evidence (e.g., Bricker 1986b) that several derivational and inflectional affixes are ignored. There is no evidence for the omission of required nouns and verbs, so we assume that these are represented. The second complication lies in the arrangement of elongated signs, so-called "affixes," with respect to each other and to the squarish "main sign" about which they are organized within the glyph block; this arrangement sometimes varies and need not conform to the linguistic order of the signs' referents (Justeson 1979b). However, the order of main signs with respect to each other is uniform and conforms to word order in speech.

With these assumptions, facts about Mayan sentence and discourse structure can be used to make inferences about the grammatical structure of hieroglyphic texts. Some types of discourse are more relevant than others: narrative in spoken language and, as Victoria Bricker has suggested to us, captions for illustrations in Colonial texts, provide appropriate models; conversation does not.

Reading Order

Some circular texts are to be read clockwise and some counterclockwise; it is presumably for this reason that Digby (1964:19) found the reading order uncertain on the flare. The text (fig. 3.7a) occupies four glyph blocks evenly spaced around the flare's upper inside surface. The disposition of the glyph blocks—their bases toward the center—is characteristic of circular texts on surfaces that slope downward toward the center; block bases are toward the outer edge on surfaces that slope upward toward the center. In circular inscriptions, the orientation of the bases of the glyph blocks determines the direction in which the inscription is to be read. Reading is from left to right, as in rectilinear texts, from a sign whose base is oriented downward. If the bases of its blocks are oriented toward the center of the circle, text is read clockwise (fig. 3.7b); if the bases are oriented toward the outside of the circle, the text is read counterclockwise (fig. 3.7c).

We label the glyph blocks A through D (fig. 3.8a); A designates the block that, we argue, constitutes the first sentence of the text. This set of labels is intended as the permanent reference system for the text of the Pomona flare. We also break some of the blocks into sub-blocks and refer to these and to the remaining full blocks as *units*; we designate them numerically (fig. 3.8b). These unit-number designations are used purely to facilitate discussion in this paper and are not intended to serve as part of the permanent reference system for the text. Similarly, each individual sign receives a numerical designation, Pom1 through Pom13 (fig. 3.8c), to facilitate reference to signs not clearly equatable with any in Thompson's (1962) *Catalog*.

Hieroglyphic Cues to Parts of Speech

Syntactic analysis depends in part on identifying parts of speech of the morphemes composing the clauses whose structure is to be determined. Several signs on the Pomona flare are identifiable with Classic signs whose grammatical class is known beyond any reasonable doubt. These provide the starting point for our syntactic analysis.

Each glyph block includes a sign depicting a head in profile. Unit 2 (Pom4), the profile head of block A, is quite similar to the profile head of Unit 3; we assume them to be instances of the same sign. This sign, as well as the profile heads in Units 6 and 7, can be identified with the profile heads of deities known from later Maya writing and iconography.

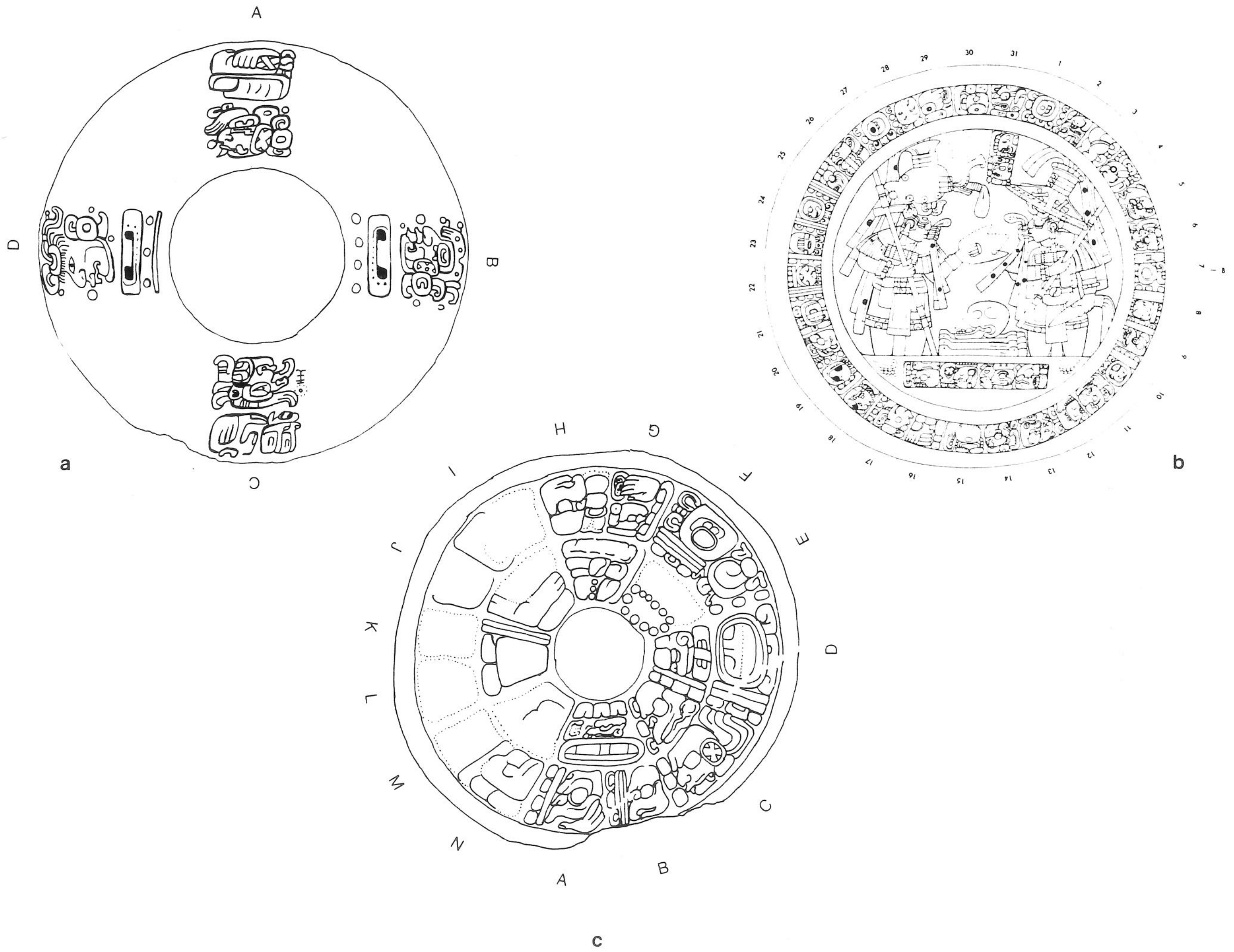
The profile heads in Units 2 and 3 are instances of T1010b, a straightforward depiction of the head of the Sun God (fig. 3.9). He is usually identified by his Roman nose, a single notched incisor, a small fang curling back from the corner of the mouth, a squarish eye with a right angle toward the lower left corner, and T544 (representing **k'i·n*, 'sun, day') infixed usually upon the backmost exposed area of the face. In the Pomona text, the incisors are more pointed than usual, and only one is notched; the comparable treatment of the incisor on Tikal Stela 31:A17 (fig. 3.9c) suggests that this may be a stylistic trait of early inscriptions. The squarish eye of the Sun God in Unit 3 is notched with a right angle in the lower left corner; this feature is atypical—the angle is usually incised within a completely squared eye—but it is found in other early inscriptions (fig. 3.9d, e). The eye in Unit 2 is similarly notched, but toward the lower central part of the eye rather than toward the left. In all other features, the Pomona examples agree with Classic instances of T1010b.

The profile-face sign in Unit 7 is T1006, the head variant for the numeral 8 (fig. 3.10a).[4] Traits diagnostic of this sign are (1) the head of a young man, with an almond-shaped eye; (2) a curl at the forehead; (3) optionally, a vegetal sprout (thought to represent a corncob in its husk) emerging from above or behind the head; and (4) a ragged (perhaps leafy) profile optionally appearing above or to the left, if a sprout does not (fig. 3.10b–d). This head ''has long been recognized as that of the maize god'' (Thompson 1950:134), an identification strongly supported by examples in which the corn element is fused to the top of the head as the main sign for the Corn God in the Postclassic codices (fig. 3.10e, f; for a Classic instance, see fig. 3.13d).

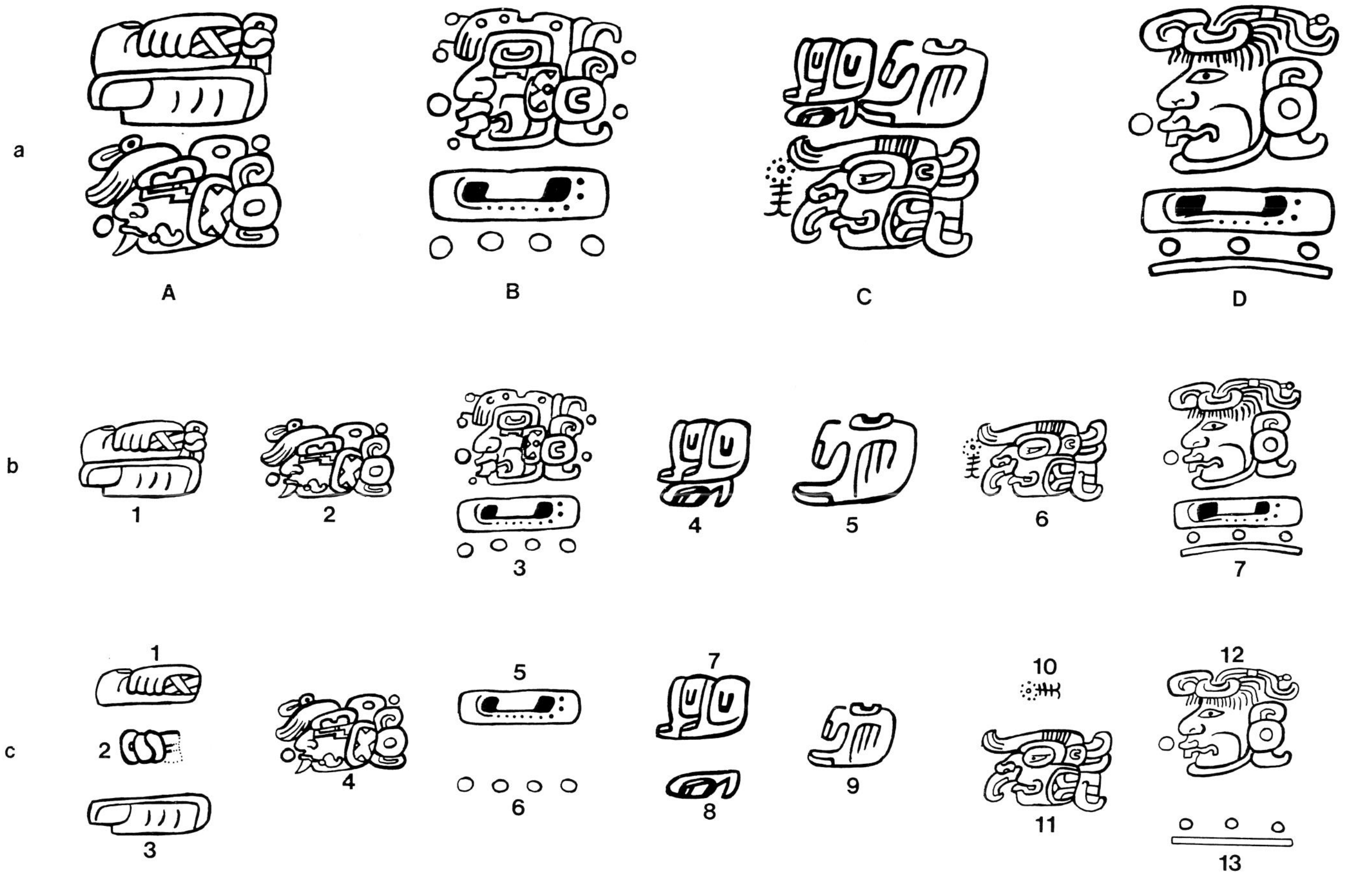
The numeral 4 is suffixed to the head of the Sun God in Unit 3 and the numeral 8 to the head of the Corn God. These numeral suffixes evidently serve here as semantic determinatives, securing the identification of the deity signs associated with them: just as the profile head of the Corn God is the head-variant numeral for '8,' so the profile head of the Sun God is elsewhere the head-variant numeral for '4.' The presence of these determiners is evidently optional, since a 4 is not suffixed to the head of the Sun

---

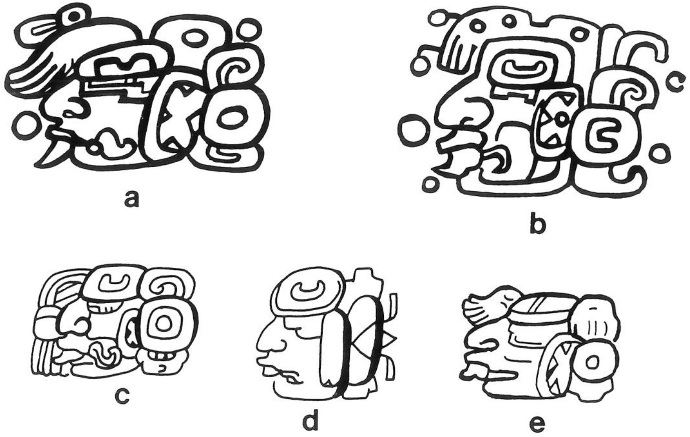
[4] Head variants are profile face signs, usually so labeled only when another sign having an abstract or conventionalized form has the same value or set of values. In the case of numerals, they constitute an organized set: numbers 1 through 12 had their own head variants, while 13 through 19 were composed of the numeral for 10 fused or adjoined with the numerals for 3 through 9.


A
B
C
D
a
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
b
A
B
C
D
E
F
G
H
I
J
K
L
M
N
c

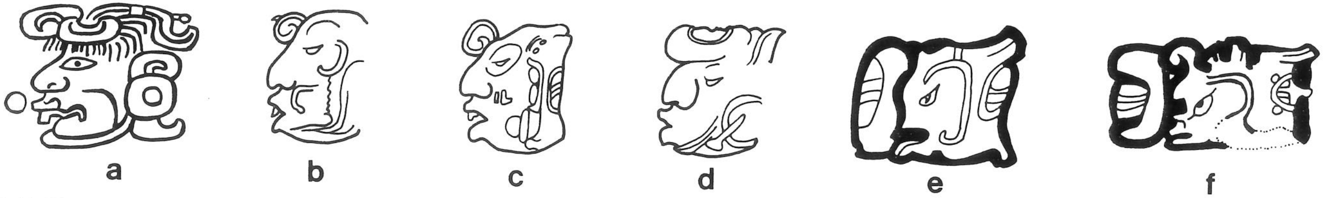
3.7 Reading order in circular texts. a. Pomona flare. (Drawing by John S. Justeson.) b. Tikal Altar 5. (After Jones 1977:fig. 10.) c. Yaxchilan Altar 3. (Redrawn by John S. Justeson from Morley 1937:pl. 26a.)


a
A
B
C
D
b
1
2
3
4
5
6
7
c
1
2
3
4
5
6
7
8
9
10
11
12
13

3.8 Reference system for the Pomona flare. a. Linear order of glyph blocks. b. Breakdown into syntactic units. c. Breakdown into individual signs. (Drawings by John S. Justeson.)



3.9 The Sun God. a. and b. Pomona flare. c. Tikal Stela 31:A17. d. Covarrubias text (see fig. 3.18a). e. Slate mirror from Bagaces, Costa Rica. (Redrawn from Balser 1974:pl. 13.) (Drawings by John S. Justeson.)



3.10 The Corn God. a. Pomona flare. b.–d. For the numeral 8. (Redrawn from Thompson 1960:fig. 24-*48, 43, 49*). e. and f. For the Corn God. Dresden Codex. (Drawings by John S. Justeson.)

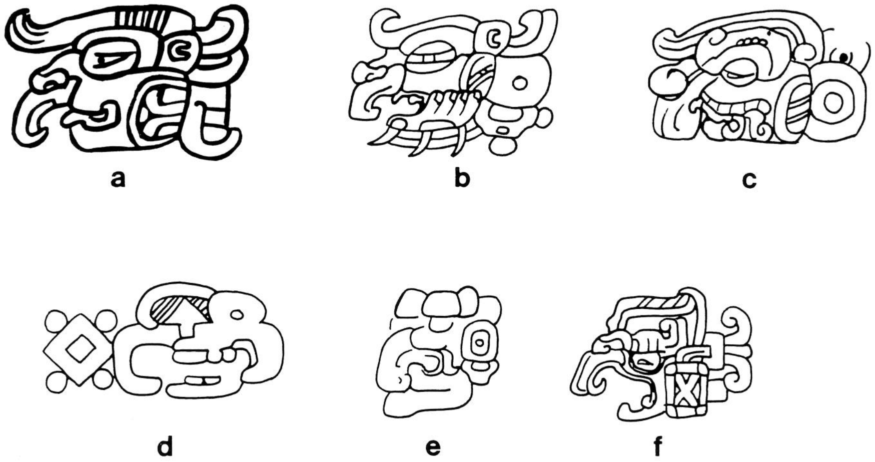
God in Unit 2. In this text, it may be stylistically determined, a way of balancing the relative visual complexity of glyph blocks: the numeral 4 is not suffixed to the Sun God head that occupies only the lower half of glyph block A, while it does appear in the instance that occupies virtually all of block B; similarly, the numeral 8 is suffixed to the Corn God head, which occupies virtually all of block D. Similar considerations of space utilization affect the appearance of optional signs in Classic inscriptions.[5]

The profile face of Unit 6 has a long lip curving downward, with the nose depicted directly upon it, and with an infix at the cheek that is variously referred to as (although we think not functioning as) a T7 or T504 *"Akbal"* sign (fig. 3.11a). The specific identity of this deity is less certain than those of the other two. Long-lipped deity faces are ubiquitous in Late Preclassic and Early Classic art from the Izapan stylistic area, in Maya architectural stucco masks from the Late Preclassic onward (see Freidel and Schele, this volume), and in Maya writing and monumental sculpture from the Early Classic and before. M. D. Coe (1980:47) believes that the Izapan "Long-lipped God . . . becomes transformed into the Mayan rain god Chac"; however, there may be different long-lipped entities in Maya writing and iconography, since they bear different complexes of accouterments. Whatever the relation of this long-lipped deity to Postclassic Maya gods, Peter Mathews (personal communication, 1982) points out that this sign is the *k'atu·n* head variant (in the *"baktun"* position) as it appears on the Leiden Plaque (fig. 3.11b). The *k'atu·n* head-variant substitutes with the sky sign T561 in this and other contexts. Another Preclassic example of this substitution is the use of the long-lipped monster as patron of the month Xul on a Preclassic monument, now in the Hauberg Collection (fig. 3.11c), and the use of the T561 sky logogram as the patron of Xul on Kuna-Lacanja Lintel 1 (Peter Mathews's observation, reported by Schele 1985b:137). These substitutions allow us to identify the sign as that of a celestial deity, even if not surely (an aspect of?) Chac. Since we are uncertain of its Postclassic identity, we will refer to it as "the long-lipped god" or "the sky god."

---

[5] The absence of a numeral suffix attached to the head occupying the lower half of glyph block A also enhances the visual parallelism of the text. Blocks B and D are opposite each other, each contains only one unit, and the main sign of that unit is a deity head with a numeral determinative suffixed. Conversely, blocks A and C are opposite each other, each is subdivided into an upper and lower sub-block, and the main sign of the lower sub-block is a deity head that lacks a numeral suffix. The numeral could have been suppressed from Unit 2 simply because there was no numeral determinative in Unit 6; no numeral determinative was available for Unit 6 because its long-lipped deity is not a head-variant numeral.

While all these deity signs can refer to the corresponding deities, they are sometimes used in other senses. T1010b, for example, can function simply as the word

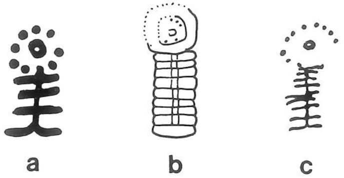


3.11 Celestial sky creature. a. Pomona flare, C, l.h. b. *"Baktun"* sign, Leiden Plaque:A3. c. Month patron on miniature stela, Hauberg Collection, Seattle:A1. d. Chichen Itza Cenote jade:A5. e. San Diego cliffs, double-headed sky monster. f. Kaminaljuyu Stela 11, headdress mask. (Drawings by John S. Justeson.)

k'i·n, 'sun, day, festival'; it appears as an element of, though not securely by itself as, the title read *mah k'ina* by Lounsbury (1974b; *nox k'i·n*, according to Justeson and Campbell 1981:sec.3.2.3); and sometimes it represents the number 4. Similarly, the sign for the Corn God can represent the number 8 and perhaps a word for corn. The sky god might refer to a title or office to which someone accedes, given that it is the object of a T51/53 sign (see below), and given textual parallels in which the long-lipped "Jester God" appears in this position in accession statements.

Most of these potential alternatives for interpreting the deity signs are not viable, including the status/office interpretation of the sky god (see below) and the numeral interpretation of the Sun and Corn Gods (note 6). The fact that every glyph block includes a deity-head sign may be scribal play, but it is circumstantial evidence for a consistent interpretation of all four; this consistency is provided only by references to deities, to nature spirits, or to forces or entities of nature.

The archaeological context of the flare and its Preclassic parallels also provide evidence for the deity or deity-substitute interpretation. The centrally deposited flare looks like the functional equivalent, in its Pomona cache, of the large, centrally deposited jade head of the Cerros cache, which was surrounded by the four jade bib-and-helmet pendant heads. The spatial relation of the small heads with the large central jade object indicates their association in the ritual of deposition, and thus a functional or symbolic relation to the central object. Since the Pomona cache was part of the same ritual complex as the Cerros and Nohmul caches, and since it agrees in the details of its archaeological context as far as this is reported, the flare, too, was most likely surrounded by the four figures with bib-and-helmet-style heads; if so, it should be functionally or symbolically related to them. While the Pomona figures all have face type A, the deities cited in the flare text stand in one-to-one relation to the bib-and-helmet head types deposited at Cerros and Nohmul. The two citations of the Sun God correspond to the deposition of two type A heads; citation once each of the sky and Corn Gods corresponds to the deposition of one type B and one type C head. This correspondence suggests that the glyphic citations relate to the same ritual as the figures and heads in the various caches. There is thus a prima facie case that the deity-head signs all refer to comparable entities—deities, persons, spirits, or the like. The associated jade heads and figures could relate, however, to the spheres of influence of the deities; for example, sky and corn are possible interpretations for the sky- and corn-deity signs. Accordingly, some deity-head signs refer to the corresponding deities, while others refer to their powers, spheres of influence, or other aspects of their roles rather than of their identities.



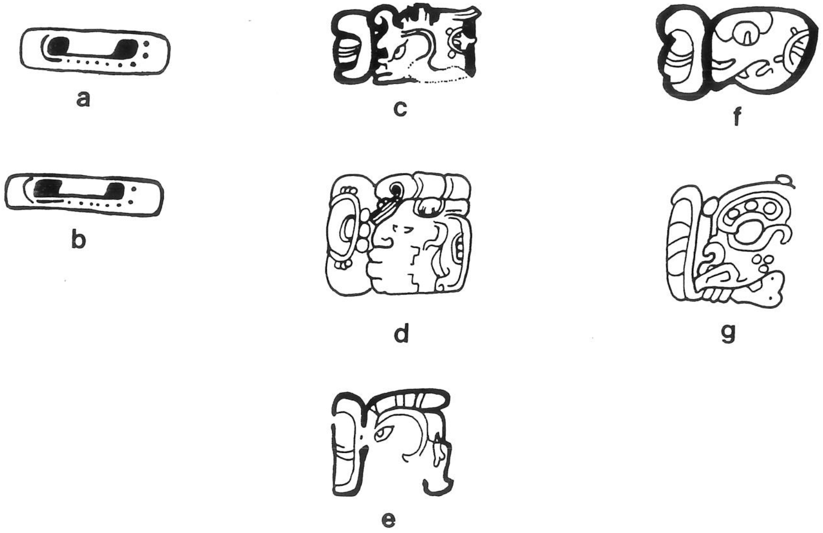
3.12 T51/53 preposition signs. a. Pomona flare, C, l.h. b. Balakbal Stela 5:A8. c. Dumbarton Oaks jade plaque A:p4. (Drawings by John S. Justeson.)

SIGNS FOR GRAMMATICAL PARTICLES AND AFFIXES

Pom10 (fig. 3.12a), the sign that precedes the head of the long-lipped god in Unit 6, is T51/53. On the Pomona flare, the sign is upside down. This inversion is found in two other texts (fig. 3.12b, c): on Balakbal Stela 5:A8, dating 8.19.10.0.0 (ca. A.D. 426), and in an early text on a jade plaque at Dumbarton Oaks, evidently from near the beginning of the Early Classic, since M. D. Coe (1976:120 and fig. 17) relates it stylistically to the Leiden Plaque. All three texts evidently fall in "Cycle 8," that is, in the "*baktun*" ending 9.0.0.0.0; the sign survives in the usual vertical orientation on no more than four texts prior to that date, so the inversion was evidently rather common in early times. Whatever its orientation, there is no doubt that T51/53 represents the general locative preposition, pYu **tiˀ* ~ *t*- and pCT **ta* ~ **t*- < pM **tʸ a* ~ **tʸ*- (Kaufman and Norman 1984:139) or **tʸi* ~ *tʸ* (Mathews and Justeson 1984:190–191). This preposition appears as *ta*, *tə*, *ti*, or *tiˀ* in different Greater Lowland Mayan languages; when the particular descendant form is unknown or irrelevant to discussion, we refer to it as **tʸa*.

Pom7, the final sign of Unit 4, is T88. This sign functions both phonetically and logographically in later texts. Purely phonetic use of T88 is rare: it serves seemingly as a phonetic complement for *xun*, 'one,' in T1000a:88 and for *k'an*, 'yellow,' in T281.88 and probably in other less secure cases, suggesting a phonetic reading as *n* + an undetermined vowel, that is, as *n*V (Fox and Justeson 1982). T88 is most often used as a morpheme sign for a grammatical suffix to verbs; such suffixes mainly have -VC or -CVC shapes. Its characteristic position seems to be after a root and before T126, which represents -*ih* or -*iš*. These grammatical contexts, along with variation between T88-*ih* and T88-(*ni*)-*ih*, and with its use as a phonetic n*V* sign, indicate that T88 represents a grammatical suffix having the phonetic shape -*n* or -V*n*. Its usual grammatical function has yet to be secured, but in some contexts a -V*n* reading can be verified; MacLeod (1983) argues for -*an* specifically in some contexts.

Pom5 (fig. 3.13a, b), which appears twice in this text, consists of a pair of dark interior bands surrounded by dots. It cannot be identified securely with any later Maya sign on the basis of form alone; its context makes likely its identification as an early form of T24/121, which it resembles. T24/121 is prefixed to T1006, the Corn God sign of Unit 7, in codex spellings of that deity's name (fig. 3.13c). This usage is found also in a Classic-period example (fig. 3.13d). More broadly, the deity names to which T24/121 is prefixed in the codices (fig. 3.13e, f) are all and only those that serve elsewhere as numerals: the head of the Corn God represents the number 8, and the head of the Death God the number 10 (the name of the Sun God is not spelled in the codices with T1010b, which can represent the number 4, so that portion of the correlation cannot be tested). Correlatively, Pom5 is suffixed to the two deity-head signs that can serve as numerals, the Sun God and the Corn God, but not to the sky-deity head, which does not. Floyd Lounsbury (personal communication, 1984) has long interpreted the T24/121 prefix in the manuscripts as a semantic determinative for deities, noting also that formally identical elements occur on the bodies of deities in Classic iconography and are identified as "deity markings" by Michael Coe and Gillett Griffin. The contextual restrictions noted above support Lounsbury's view, while suggesting that it is neither



3.13 Pom5 suffix. a. and b. Pomona flare, B, D. c. Name of Corn God from Dresden Codex 20c. d. Name of Corn God from Tikal Temple 4, Lintel 3:F5. e. Head variant of numeral 8 (suppressing jawbone for 10 in original, which yielded numeral 18). f. Name of Death God, Dresden Codex 20c. g. Xcalcumkin Initial Series Lintel, head variant of numeral 10. (Drawings by John S. Justeson.)

a generic deity determinative, nor one restricted to use with deity signs when they function as names (see fig. 3.13e, g). The iconographic usage, which includes non-numerical deities, suggests a broader construction of the context than we recognize from strictly glyphic evidence; possibly, however, the iconographic usage was broader than the glyphic. Most likely, Pom5 is a form of T24/121 and functions as a semantic determinative associated with deity signs.[6]

---

[6] If our identification of the sign with T24/121 is not correct, it is still likely that Pom5 represents either a grammatical suffix or a semantic determinative. It may serve as a semantic determinative associated with numeral deity signs, independent of its identification. If this function, too, is rejected, then the presence of Pom5 precisely in those compounds that take a numeral as a semantic determinative requires an explanation by which (1) the occurrence of numerals and the occurrence of Pom5 are intrinsically related, or (2) the factor(s) explaining the use of the numerals also accounts for the use of Pom5, unless (3) the association is coincidental.

(1) If Pom5 is not a semantic determinative, the most straightforward way that the occurrence of a numeral could depend intrinsically upon the occurrence of Pom5, or vice versa, is for the sign to represent a numeral classifier. Barbara MacLeod (personal communication, 1982) has suggested to us that the sign might have this function. Specifically, she suggests that Pom5 might be a conventionalized version of the T301 footprint sign for **b'e·h*, 'road' (fig. 3.16c:1); given the historical source of **p'* in **b'*, she further suggests that it might represent the general numeral classifier **p'ehl* (Chol *p'eh*). However, a numeral-classifier identification entails treating the deity signs of Units 3 and 7 as numerals; we have shown above that they most likely represent deities, deity im-

Clause Structure: Clause Boundaries and Roles of Units

In this section, we determine which glyphic compounds fall into each sentence in the Pomona text, what the syntactic roles of the compounds are, and, roughly, the meanings of these sentences. These determinations are made, in part, by using facts about the syntactic structures of sentences in modern Mayan narratives to identify the subjects, direct object, and predicates of the sentences, and by adducing epigraphic evidence concerning the meanings of the predicates.

SYNTAX OF NOUNS AND IMPLICATIONS FOR PREDICATES

The conclusions reached so far lead to three inferences about the syntax of the Pomona text. (1) The deity-head signs of Units 2 and 6, and the compounds containing the head signs in Units 3 and 7, occupy the syntactic position of nouns. (2) The inscription consists of two sentences, one of which begins at Unit 3. (3) The predicate of one sentence appears in Units 4–5, the predicate of the other in Unit 1.

The deity-head signs of Units 2 and 6 must occupy the syntactic position of nouns, since that is true of all words denoting deities. The deity-head signs of Units 3 and 7 have Pom5 suffixed, so these *compounds* might occupy other syntactic positions. We have found, however, that Pom5 functions probably as a semantic determinative, or

---

personators or surrogates, or some other entity or identity related to the deities. Furthermore, if Unit 3 represented a numeral + numeral classifier, a counted noun would have to follow the classifier, unless the sentence of which it is a part is equational (lacking a verb or having a copula). We demonstrate below that it is immediately followed by an auxiliary verb + transitive main verb.

(2) Accordingly, the association of Pom5 with numeral signs would be best accounted for by positing that the factor leading to the use of numeral suffixes also accounts for the use of Pom5. That factor was identified above as visual, possibly including the use of an optional sign (a semantic determinative) in an otherwise sparse glyph block but not in those with much detail. Pom5, then, could also be an optional sign used in sparser glyph blocks, a sign representing either an element that formed a part of the names of the gods mentioned in those blocks or a semantic determinative marking deity names.

(3) Treating the association of Pom5 with numeral signs as a coincidence, and rejecting the semantic determinative interpretation of the sign, would require that the sign represent a morpheme or word linguistically distinct from and additional to that represented by the deity signs. In this case, since it is interposed between the deity signs and the numerals that correspond to them, Pom5 would be part of the same syntactic constituents as the deity names. For Pom5 to represent a root here, the deity names would have to have a root in common. Pom5, therefore, would probably accord with the usual form/function correlation of elongated hieroglyphs; these signs normally function as phonetic signs, as grammatical affixes or particles, or (if as roots) as adjectives. The text is too early for Pom5 to be interpreted as a phonetic complement to the deity logograms, and the position after the deity signs excludes adjectival function.

else (note 6) as a grammatical suffix. If it is a semantic determinative, as the suffixed numerals are, then the only linguistic element designated in each compound is that denoted by the deity sign; in this case, the situation is the same as for Units 2 and 6. Suppose, instead, that Pom5 represents a grammatical suffix. Suffixes to names do not function syntactically in Mayan languages; they can at most derive a new name from an old name or form a part of a name. Thus, Pom5 as a grammatical suffix would not affect the syntactic role (subject, object, etc.) of the noun to which it is appended. For purposes of syntactic inference, Units 3 and 7 may be treated as though they consisted of the deity signs only.[7]

That Unit 3 marks the beginning of a clause is readily established on syntactic grounds. Co-referential occurrences of a given noun—occurrences referring to a single individual—are not permitted within a single sentence in normal Mayan discourse. When a single individual is referred to on two occasions within a single sentence, the reference is by means of a pronoun in at least one instance. Since the name of the Sun God appears twice in the text of the Pomona flare, each instance must belong to a different sentence. Since the two instances of the Sun God's name are adjacent, there must be a sentence boundary between them, that is, between Units 2 and 3.

Since Units 3 and 7 consist of names alone, each must be a part of a larger sentence.[8] Unit 3 must be a part of the sentence that includes block C (Units 4–5), while

---

[7] A similar result holds even if Unit 3 and/or Unit 7 do not represent deity names but rather associated values of the same signs. The signs represent nouns, for all known uses of these and most other deity signs are nominal. Again, if Pom5 functions as a semantic determinative, as we believe, it does not change the syntactic class of the deity signs. Suppose, instead, that Pom5 represents a grammatical suffix that changes the grammatical class of nouns. From nouns, only verbs, nouns (including adjectives in Mayan), and numeral classifiers are derived. Unit 3 is followed by an auxiliary verb, which would be ungrammatical were Unit 3 a verb in the same clause (Unit 3 cannot constitute a clause on its own; see note 8). Units 3 and 7 would have to be preceded by a numeral, were they numeral classifiers. Units 3 and 7 must represent nouns of some sort.

[8] The same result holds even if Unit 3 and/or Unit 7 do not represent deity names but related nouns. For a noun to constitute a sentence by itself, it must be stative, taking an absolutive suffix (pronominal subject of an intransitive verb) and meaning, for example, 'I am a [sun, corn, etc.].' If Pom5 is taken as the absolutive suffix, it is first or second person; in the third person, no suffix occurs, and "zero" morphemes are never represented in writing systems (apart from those developed in this century by linguists for their own use). No plausible meanings are gleaned from this analysis, and persons other than third are extremely rare, if they are represented in Mayan hieroglyphs at all; thus, Pom5 is probably not an absolutive suffix. If, instead, Units 3 and/or 7 represent stative nouns with third-person pronominal subjects, the subjects would have to be identified elsewhere in the text. The two possible identities are the Sun God (Unit 2 or 3) and the Corn God (Unit 7). A stative Unit 3 could not, tautologously, reference Unit 2 as its subject; it would, therefore, reference Unit 7 as subject, which would be excluded thereby from stative use referencing the Sun God as subject. Thus, Unit 3 and Unit 7 cannot both be stative. Stative use of either is possible structurally, but, given the readily recoverable aspects of the meaning, it is diffi-

Unit 7 could belong with either block A or block C. Thus, exactly two sentences are inscribed, and either (1) blocks B–C–D (Units 3–7) form one sentence and block A (Units 1–2) another or (2) blocks B–C (Units 3–6) form one sentence and blocks D–A (Units 7–2) another. We demonstrate below that alternative (1) is correct.

The predicates of the two sentences, if expressed, must appear in portions of the text that are not occupied by names of deities. Units 4–5 are the only such portions of blocks B–C–D, and Unit 1 is the only such portion of blocks D–A. Thus, the predicate of the second sentence, if expressed, should appear in Units 4–5 and that of the first sentence in Unit 1. These conclusions are supported by additional evidence presented below.

Having constrained the sentence membership of the deity signs, we now attempt to determine their grammatical roles in both sentences. Our arguments make use of the fact that in Mayan languages there are fixed relationships between discourse context and, on the one hand, word order (Durbin and Ojeda 1978) and, on the other hand, case and transitivity (John DuBois, personal communication, 1985; Smailus 1982).

First, it can be demonstrated that the Sun God is the subject of the sentence that begins at Unit 3. In Mayan languages, it is usually the case that nouns in syntactic roles other than direct object, possessor, or subject are preceded by a preposition or by a so-called relational noun.[9] Since no such element precedes the head of the Sun God in Unit 3, it must be either a (1) direct object, (2) possessor, or (3) subject.

(1) If it were a direct object, then the word order in Units 3–5 would be Object + Verb. Object + Verb word order is of low frequency in Mayan narratives and is found only under the following conditions: (a) the object is being contrasted with some other noun that has been previously mentioned or is implicit, or (b) the object is the topic of the sentence and resumes a previous topic that was not mentioned in the previous sentence. Since this text has only two sentences, no sentence can intervene between Unit 3 and a previous sentence, so resumptive focus cannot be involved. More than two sentences are normally required to set up a context for contrastive focus as well. Furthermore, if Unit 3 were a direct object, then the only noun left to be the subject would be Unit 7; in this case, the only noun with which to contrast Unit 3 would be Unit 2, but both Unit 2 and Unit 3 name the Sun God and thus do not contrast.

---

cult to force such a structure and still derive a meaningful text. We achieve a meaningful text under a third-person stative hypothesis only by treating Units 3 through 7 as a complex sentence containing one main clause and one dependent clause; this treatment entails an assumption that a relativizer, which should introduce the dependent clause, is not represented in the script. A possible interpretation from this point of view is presented in note 21.

[9] Relational nouns form a class found in all Mayan languages. A relational noun is inflected as a possessed noun and indicates syntactic or spatial relationships involving the noun phrase it introduces.

(2) If Unit 3 were a possessor, the noun it possesses would have to be that of either Unit 6 or Unit 7, since there are no other nouns in the sentence. Consider the possibility that Unit 7 represents a possessed noun; in this case, the verb and a *_tʸa_ preposition + noun phrase intervene between the initial (possessor) noun and the final (possessed) noun; this is not an admissable sentence structure in Lowland Mayan languages. Neither can the noun of Unit 6 be possessed by that of Unit 3, however, since the verb cannot intervene between a possessor and a possessed noun preceded by the *_tʸa_ ~ _tʸ_- preposition.

(3) The only remaining possibility is that Unit 3 is the subject of the sentence. The resulting word order is then Subject-Verb, which is of high frequency and occurs in a variety of discourse contexts.

The appearance of T51 before the name of the long-lipped deity in Unit 6 provides additional syntactic information. T51 and T53 are stylistic variants of the same sign, which functions in most cases as a marker of locatives; it is securely identified with the locative preposition *_tʸa_. The descendants of this preposition have various functions in Mayan languages. Most commonly, it serves as a locative case marker on inanimate nouns, corresponding to the usual function of T51/53 in hieroglyphic texts. In our experience, however, locative nouns in Mayan languages are always inanimate, and this is true in particular of locative nouns introduced by the preposition in Yucatecan and Cholan–Tzeltalan languages. The next most common use of *_tʸa_ in hieroglyphic texts—in accession statements—also requires an inanimate noun. It introduces a noun or noun phrase designating a state, including tenure in an office, as in Cholan _woli koč-el ti hwes_, 'I become judge'; this type of construction can also be excluded on the basis of the preceding verb (see below). Another pan-Mayan use of this preposition is to introduce benefactive indirect objects, which are normally animate nouns. In Cholan, a third-person-singular indirect-object phrase has the form _t-u-b'ah_ + noun; in Yucatecan, the structure is _tiʔ_ + noun. If the glyphs in Unit 6 do express an indirect object, then the language of the text must be Yucatecan. Indeed, we know of no other plausible syntactic role for the sequence *_tʸa_ + animate noun than that of a benefactive in an early form of Yucatecan. In all other Mayan languages, and in all other contexts in Yucatecan, where a descendant of *_tʸa_ introduces a noun phrase whose head is an animate noun, some relational noun must intervene between the preposition and the head noun.

Constraints on the syntactic structures appearing in the initial sentence of a Mayan narrative speech indicate that the sentence beginning in block B is the second in the Pomona text. Since new information is not introduced in oblique nouns in Mayan narrative discourse, these narratives almost always begin with a sentence having an intransitive predicate and no oblique cases among its noun phrases. Unit 6, however, is an oblique case, a benefactive indirect object. In addition, the predicate of an initial sentence in a Mayan narrative is itself initial within that sentence. Since the predicate of the sentence beginning in block B is in block C, the predicate is not initial in this sentence. Accordingly, the sentence beginning in block B is unlikely to be the first in the text. Since the text has only two sentences, it apparently begins with the sentence ending in block A (this sentence should, therefore, have an intransitive predicate, and this predicate should be initial in the sentence).

Similarly, if Unit 7 is part of the same sentence as Units 3–6, then its syntactic role must be as a direct object, for it is not preceded by a relational noun or preposition. Were Units 7–2 to make up a sentence, we could exclude the possibility that Unit 7 is a direct object—the predicate, not an object, should be initial in this sentence. Unit 7 could be a possessor were Units 7–2 to form an equational sentence with a deleted copula, with Unit 1 possessed by Unit 7 and the pronominal prefix marking possession not represented by the script. We show below, however, that Unit 7 is not part of the sentence including Units 1–2; it is almost certainly the direct object of a sentence composed of Units 3–7.

SYNTAX OF PREDICATES

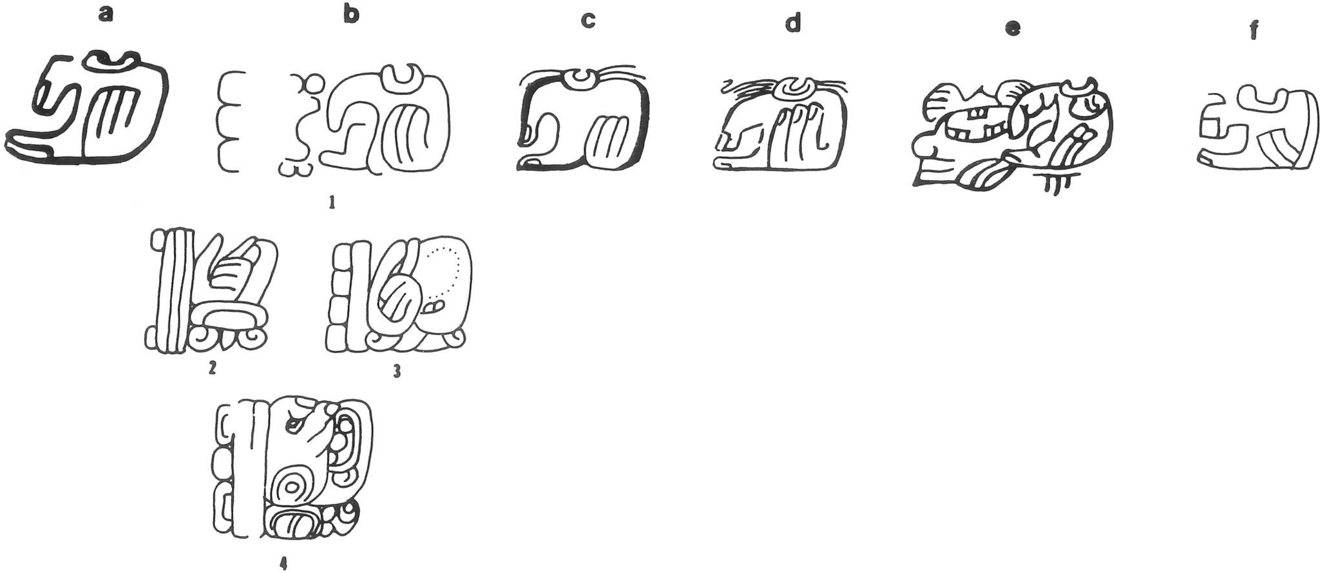
An interim level of interpretation for the first sentence is that it is an intransitive statement concerning the Sun God, possibly in connection with the Corn God, and, for the second sentence, that the Sun God is doing something for the long-lipped god, possibly involving the Corn God. Potentially, the nouns involved do not refer to deities per se, but to associated phenomena. Further syntactic and semantic analyses depend on more specific interpretations of the signs in the predicate compounds.

The Second Predicate: Units 4–5. We have found that the predicate of what is probably the second sentence is in Units 4–5. If a predicate is to lack an expressed verb, the clause of which it is a part must be an equational or existential statement. The nonlocative use of the preposition *$t^{y}a$ on the name of the long-lipped god insures that the statement is not existential or equational, so the predicate in Units 4–5 must include an expressed verb.

The predicate is divided into two sub-blocks. The first opens with what Thompson (1962) designated T840. T840 is a compound in which a single basic sign, Pom7, is replicated. T88 is suffixed to this Pom7.Pom7 compound. Since the text predates the earliest nonmorphemic phoneticism in Mayan writing by two centuries or more (Justeson 1978:341–342), it is the morphemic (logographic) rather than the purely phonetic use of T88 that is pertinent here; morphemically, T88 functions as a verb suffix *-n*, *-a(·)n*, or -V*n*. Accordingly, Pom7.Pom7 can be identified as a verb root or stem. Although the glyphic spelling of this verb involves replication of its main sign Pom7, this need not reflect grammatical reduplication of a root. In their early stages, heavily logographic scripts often replicate signs to express related concepts; a likely Maya instance is the doubling of a sign (T528) for 'year' to express the word for a 400-year period (Justeson 1978:341–342).

Unit 5 consists of a single sign, Pom9 (fig. 3.14a). Its diagnostic features are depiction of a hand, from the palm side; a "collar" located centrally along its upper margin, at the wrist; a thumb curling downward on the left, over an outstretched forefinger; and the remaining three fingers curling upward. As executed, the posture is anatomically impossible; it presumably reflects the convention of showing each part of the body from an angle that is revealing for that part, rather than showing all parts from the same angle. Pom9 is found on at least five additional texts, one or two Preclassic and the rest Early Classic.

In the example of figure 3.14e, Pom9 is part of a name compound. Mayan names are normally made up only of substantives, verbs, and bound grammatical affixes. The sign is probably not a grammatical affix; it would be most unusual for such a sign to occupy an entire glyph block, as does Pom9 in the text on a late Early Classic shell trumpet (M. D. Coe 1982a:123), and the earliest examples of this rare usage are from late in the Late Classic. So, Pom9 represents either a noun or a verb. On El Zapote Stela 5 (fig. 3.14b:1), it is part of Glyph D of the Lunar Series, whose numeral prefix indicates the number of days elapsed in the current lunar month. Glyph D compounds usu-



3.14 Pom9. a. Pomona flare, C, u.h., b. b. As a verb in day-counts (Glyph D) within lunar months on: 1. El Zapote Stela 5:A6; 2. Tikal Stela 3:A5; 3. Balakbal Stela 5:A5; 4. Palenque Temple of the Sun, doorjamb panel, B2 (bodega #332). c. In sacrifice passage from text illustrated by Covarrubias (see fig. 3.18a), Ap.3. d. In sacrifice passage from shell trumpet, C1. (Redrawn after M. D. Coe 1982a:123.) e. In name on jade plaque, probably from Río Azul. (Redrawn after M. D. Coe 1982b.) f. Kaminaljuyu Stela 10:E3. (Drawings by John S. Justeson.)

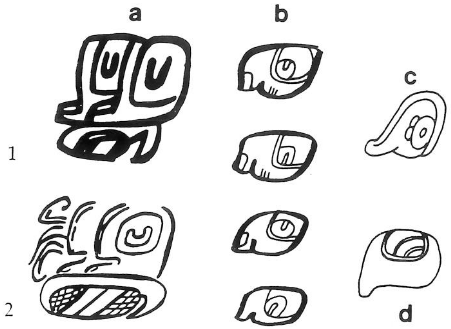
ally have either the T683b Moon sign or the form of T217 illustrated in figure 3.14b:2, 3. The latter sign, typical of Early Classic texts, depicts the same posture as Pom9, executed more naturalistically; Late Classic examples are usually depicted from the opposite side of the hand. This form of Glyph D is almost invariably spelled numeral + T217 + T181 + T2/24/82/83 + T126; T217 and T181 form an immediate graphic and syntactic constituent in all cases. This indicates that the form of T217 appearing in Glyph D is a verb, since the morphemic function of suffixed T181 (for *-ax*) is as a passive or perfective suffix to verbs (Fox and Justeson 1977b:164; MacLeod 1984:236–241; Bricker 1986a:chap. 7; cf. Kaufman and Norman 1984:104–105, 107–109). So, Pom9 functions as a verb in the El Zapote text. Pom9 opens the passage of which it is a part on the trumpet text (fig. 3.14d). This suggests that it is the verb here as well; in hieroglyphic texts lacking calendrical statements, initial position is usually occupied by a verb, and this is the usual position for the predicate—the verb, except in stative or equational sentences—in modern Mayan stories. Furthermore, Pom9 is followed in the trumpet text by a series of nouns, until the verb of the next sentence at C5. The example illustrated in figure 3.14c comes from a text whose internal structure does not provide evidence requiring the interpretation of Pom9 as a verb but is still consistent with this interpretation. Finally, it appears to us that almost all Mayan signs depicting hands were verbs, at least in origin; this in itself makes it probable, though not definite, that this particular hand sign is a verb.[10]

Units 4–5, therefore, appear to form a sequence of two verbs. In Mayan languages, compounded roots sometimes form verbs, but in such cases it is exceedingly rare for both roots in the compound to be verbs; in any case, verbal suffixes appear after the second root rather than after the first in compound verbs. Accordingly, Units 4–5 appear to represent two separate verbs. The use of two successive verbs as part of the predicate of a single sentence indicates that the first is an auxiliary verb and the second the main verb of the sentence.

The first verb can be identified fairly precisely. Only three Maya signs have the general profile of Pom7 (fig. 3.15): T512/515/601 (which, fused with T528, also forms

---

[10] In Egyptian, too, the logographic use of hand signs is predominantly for verbs or as rebuses on verbs. In both Mayan and Egyptian, the logic underlying the use of hand and arm signs as verbs is based on a correspondence between actions performed by the hand or arm and the depiction of the hand or arm in action. Nonetheless, such actions in a minority of instances are the performance of a gesture having some explicit meaning; since gestures can indicate parts of speech other than verbs, hand signs depicting gestures can also be used for other parts of speech. This possibility is realized in some substantially pictorial scripts. In Egyptian, the sign for the negative 'no, not' is depicted by a pair of outstretched arms, hands pointing outward, and a similar gesture is the basis of the negative sign of archaic Chinese, and perhaps of Mayan T74 (for the syllable *ma*), given GLM **ma*, 'negative' (see Mallery 1881:355–356). Similarly, one Hieroglyphic "Luvian" sign represents 'I' by showing the upper body of a man pointing to himself. The probability that the sign is a verb, based strictly on its representation of a hand in action, is by no means a certainty.



3.15 Pom7. a. Pom7.Pom7.T88, on: 1. Pomona flare, C, u.h., a; 2. Costa Rican jade plaque B4. b. T667. Dresden 31c, 35c, 38c, 40c. c. T512/515. d. T712. (Drawings by John S. Justeson.)

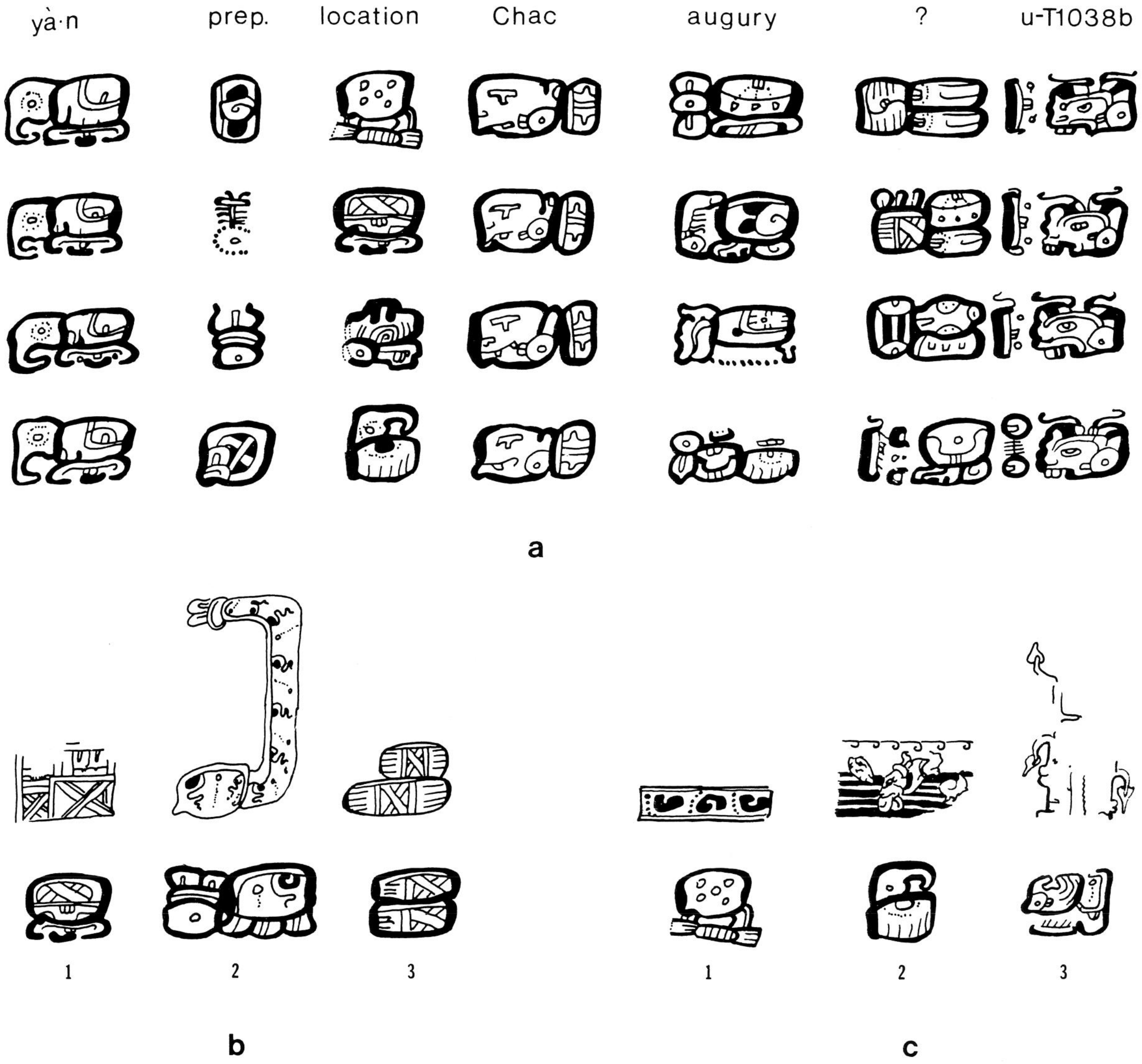
T532); T712; and T667. The interior detail of Pom7 is effectively within the range of variation of T667 and differs in all features but the profile from both T512 and T712. In both Pom7 and T667, a thumbnail appears on the projecting element; both signs have a squarish area marked off as the upper right quadrant of the sign (usually by a double line in T667, but often by a single line, as in Pom7); and both have a U-shaped element, usually inverted in T667, within this area. Most examples of T667 differ from Pom7 in their heavily foreshortened depictions of fingers, facing downward; many, however, lack such depictions, and foreshortening does not seem to enter the repertoire of the Maya sculptor until late in the Early Classic. Both signs appear to depict a left hand, fist downward, with thumb projecting forward. We tentatively identify Pom7 with T667.

T667 is found only in the Postclassic codices, where it occurs invariably as a verb. Fox and Justeson (1984:56, n. 34) sketch the phonetic and semantic evidence that this verb is read *yà·n*, 'to exist; to be (in a place).' The phonetic evidence consists of phonetic complements: T23 (for *na*) is often suffixed, indicating that the word represented by T667 ended in *-n*, and signs, such as T238, for the simple vowel *a* are sometimes prefixed, indicating that it began in *a* or G*a*, where G = *h*, *x*, *w*, or *y*. The semantic evidence is provided by its recurrent context (fig. 3.16a):

T238.667:23 + loc. prep. + location + God B (Chac) + variable + *u*-T1038b.

The accompanying scenes depict God B in the location specified, in cases for which both the depicted and spelled locations are clear (fig. 3.16b, c); he performs a wide variety of activities in those places, and, since the verb is constant while the location varies, the best inference is that the meaning of the verb is 'to be (in a place).' The number of attestations of this structure is so great that the *yà·n* reading is quite secure.

The use of the T88 suffix to Pom7.Pom7 provides phonetic confirmation of the identification of Pom7 with T667, given the history of the Yucatecan root **yà·n*. The word descended from a morphologically complex early Lowland Mayan derived form, **ay-a·n*, the root of which descended from pM **ar*, 'to exist; to be (in a place).' The derived form **ay-a·n* exists only in Cholan and Yucatecan languages. It is readily interpretable as being derived from pCT **ay* by the addition of a proto-Cholan inchoative and intransitivizing derivational suffix *-*an* (presumably from pre-Cholan *-*a·n*); we know of no intransitivizing suffix in Yucatecan with approximately this phonetic shape, so the derivation of Lowland **ay-a·n* from the root **ay* apparently took place in pre-Cholan and diffused to Yucatecan, where subsequently, by proto-Yucatecan times, **ay-a·n* shifted by phonetic erosion to the simple root **yà·n*. The identification of Pom7.Pom7:T88 with **ay-a·n*/*yà·n* on formal grounds is confirmed on phonetic and morphological grounds by the T88 suffix; since the script did not use purely phonetic signs at this date, T88 represents a -V*n* grammatical suffix, as in the **ay-a·n* form.


yà·n
prep.
location
Chac
augury
?
u-T1038b
a
1
2
3
b
1
2
3
c

3.16 Locations of the sky/rain god, Dresden Codex. a. Structure of passages, 65b–60b. b. Pictures and spellings of places, with locations depicted and spelled similarly. c. Other depicted locations recognizably equatable with their spellings: 1. *be·h-el*, 'road,' 65b; 2. *ha'*, 'water,' 66b; 3. *čika·x*, 'incense tree,' 33c. (Drawings by John S. Justeson.)

Further evidence for our interpretation of Pom7.Pom7:T88 comes from the only other occurrence of the compound (pointed out to us by Peter Mathews)—on an Early Classic jade celt from Costa Rica (fig. 3.15a:2). This example takes T126 as prefix, consistent with initial *a-*, *i-*, or *y-* (Fox and Justeson 1984:54–62; Bricker 1986a:43–76) and thus with either *ya·n* or *ay-a·n*. If the compound represents *(a)ya·n* as a main verb, it specifies that a stated person is in a stated place (both specific references are lost). This is semantically plausible in context: the last preceding verb on the celt was T367, and its T178.181 suffix (for *-l-ax*) suggests that it was a positional (see Schele 1982:11; MacLeod 1984:243–244; Kaufman and Norman 1984:107; Justeson 1985:470; Bricker 1986a:160–165); this is appropriate in locational statements. (The glyph block that formerly intervened between the T367 verb and *ay-a·n* most likely named the subject of T367.)

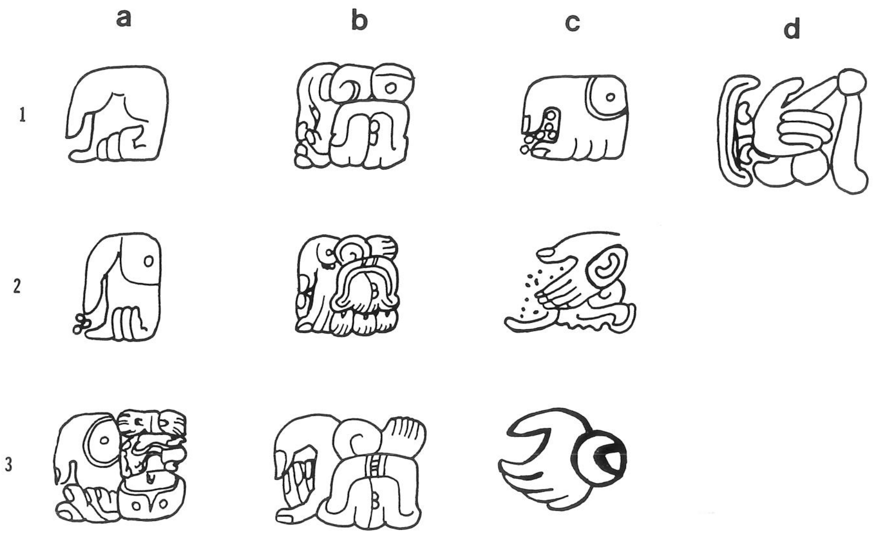
The phonetic and semantic data on the use of T667 as a main verb suggests that Pom7.Pom7:T88 can be identified with early Lowland Mayan **ay-a·n* (> pYu **yà·n*). In the Pomona text, the compound does not function as a main verb, but as an auxiliary; the modern descendants of pYu **yà·n* are also used as auxiliary verbs. This usage is indicated explicitly in grammatical descriptions of Itza (Hofling 1982:158), Mopan (Ulrich and Ulrich 1976:14, 16, 251), and Yucatec (Blair 1964:42; Poˀot and Bricker 1981:viii). Although not described as such by Bruce (1968), Lacandon texts (Bruce 1974) also show the use of *yan* as an auxiliary, that is, as an uninflected verb introducing a fully inflected verb in the incompletive aspect. This auxiliary verb is, therefore, found in every Yucatecan language; we reconstruct **yà·n* as a proto-Yucatecan auxiliary verb. Since the number of verbs that function as auxiliaries in Mayan languages is small, the syntactic function of **yà·n* as an auxiliary verb constitutes a fairly compelling confirmation for the identification of Pom7.Pom7:T88 with **ay-a·n* linguistically and with T667 glyphically. The T88 sign for a -V*n* suffix to the auxiliary is especially strong evidence for the reading, since such a suffix is appropriate to **ay-a·n* but to few other auxiliaries in either Cholan or Yucatecan.

It is also possible to reconstruct the approximate meaning of this proto-Yucatecan auxiliary verb. In Mopan, it indicates necessity, as in *yan u-hant-ik*, 'he has to eat it' (Ulrich and Ulrich 1976:14; Pierre Ventur, personal communication, 1983). It has the same meaning in Itza, as in *yan a-b'oˀt-ik ten aˀ b'aˀaš t-a b'etah ten-e*, 'you have to pay me what you owe me' (Ventur 1976, vol. 1:4, vol. 2:3); Hofling (1982:158) characterizes it as ''obligative'' aspect. For modern Yucatec, Blair (1964:42) glosses *yà·n* as marking ''obligative'' and Bricker (Poˀot and Bricker 1981:viii) as marking ''compulsive'' aspect, agreeing with Mopan and Itza; for Classical Yucatec, the Motul dictionary translates it as 'there exists/existed an occasion when . . .' for example, *yà·n a-haȼ'-ik a-č'uplal*, 'have you beaten your wife?' (Martínez Hernández 1929:444). The Motul's gloss accounts for the use of *yan* as an auxiliary in Lacandon texts, as in *yan u-čiˀik b'alum*, 'the jaguar has eaten it' (Bruce 1974:211). The existential sense of the Lacandon–Yucatec auxiliary **yà·n* is closely related semantically to the basic existential meaning—'to exist; to be (in a place)'—of **yà·n* as a main verb. The necessity/obligation sense of the auxiliary in Mopan, Itza, and Yucatec is also directly related to the use of **yà·n* as a main verb in the pan-Yucatecan construction *yà·n* X *tiʔ* Y, which means 'Y has/have X' (literally, 'there is/are X to/for Y'); auxiliaries for obligation or necessity commonly are, or are derived from, main verbs meaning 'to have' (as in English 'to have to'). Because of the close semantic relation of pYu **yà·n* as a main verb to both its existential and necessity meanings as an auxiliary, either meaning is viable for the early *ay-a·n* of the Pomona text, and we have no independent evidence that allows us to decide between them. Indeed, these apparently distinct senses may be unified via William F. Hanks's (personal communication, 1983) observation that the nature of obligation or necessity carried by *yà·n* in modern Yucatec is roughly 'what has been preordained' or 'existential necessity,' apposite in the course of history as foretold or reported.

The meaning of the main verb, Pom9, can be approximated by its formal and semantic relation to another sign, T710 (fig. 3.17c). The meaning of T710 is roughly known, for the sign overtly depicts the scattering of solid particles or the sprinkling of liquids, and it appears as a verb (usually for the main event) in the texts of some monuments that also depict a single or main figure in the act of scattering or sprinkling (Thompson 1950:193–194; Hammond 1981; Stuart 1984 and this volume; Love 1986a, 1986b; Bricker 1985). T710 depicts a hand that exhibits a posture formally similar to that of Pom9; the range of variation of the main sign of Glyph D of the Lunar Series encompasses both Pom9 and T710; and a seemingly nondepictive diagnostic of Pom9, the collar at the wrist, occurs on a Late Preclassic example of T710 (fig. 3.17c:3). Since T710 depicts the action indicated by the verb that the sign represents linguistically, Pom9 also, most likely, represents a verb referring to some action performed by the hand in a manner at least partially similar to the casting of small grains or droplets.

The postures depicted by T710 and Pom9 differ, so the two may at times represent different verbs. Evidence of this comes from a text discussed by M. D. Coe (1982b): Pom9 appears in both instances of a name compound (fig. 3.14e), T710 in the sole instance of a casting verb (fig. 3.17c:3). Alternatively, or in addition, T710 could depict hand positions from different stages of the action depicted by Pom9, either when the three fingers that, in Pom9, are tucked into the palm have not yet been retracted to that position or when they have already been lowered somewhat from that position.

Nonetheless, Pom9 appears to represent the same verb as T710 on some occasions, for it appears in both of the major contexts in which T710 appears. As already discussed, each serves as the main sign in Glyph D of the Lunar Series. Otherwise, T710 usually serves as a main verb referring to a ritual enacted on a year-ending date, normally the end of a multiple of five years within the *k'atu·n* in the Maya Long Count. Late, naturalistic examples of Pom9 appear as verbs at Piedras Negras, associated with



3.17 Hand signs related to Pom9. a. Late examples of Pom9: 1. Piedras Negras Altar 1:E′2; 2. Piedras Negras Stela 4:A17; 3. Palenque bodega, #472 (Schele and Mathews 1979). b. T220 ritual: 1. Palenque bodega, #142 (panel from Southwest Court), A5; 2. Palenque, Palace Tablet, P17; 3. Yaxchilan Lintel 37:C1. c. T710: 1. typical form; 2. on Early Classic plaque (redrawn after M. D. Coe 1982b); 3. painted on a Late Preclassic vessel from San Estevan, Belize. d. T218, for ending of time period, Tikal Stela 3:A8 (see fig. 3.14a:2). (Drawings by John S. Justeson.)

the date 9.0.0.0.0 (Thompson 1944a:72) on Altar 1:E′2 (fig. 3.17a:1) and with 9.15.5.0.0, accompanied by a depiction of the ritual, on Stela 40:A17 (fig. 3.17a:2).

Further evidence of the sometime identity of Pom9 and T710 is supplied by an identical phonetic reading for the two signs. Schele (1982:83–85) and Stuart (1984) provide evidence from phonetic complements to T710 that that sign represents the word *mal*, as Kelley (1976:51–52) originally suggested; Kelley and Stuart consider the sign to represent pTz _*mal_, 'to sprinkle,' or a cognate,[11] so the reading is viable semantically. As pointed out to us by Peter Mathews (personal communication, 1983), the compound illustrated in figure 3.17a:2 is a naturalistic version of Pom9; suffixed phonetic complements show that this instance is read #*mal*.[12] The *mal* reading can also account for the presence of Pom9 (and T710) in Glyph D as representing Lowland Mayan **mahl*, 'to pass'; Glyph D may refer to the passage of the number of days specified by its coefficient. The same reading may also apply to the T218 "ending" [= '(have) pass(ed)'?] sign, used to indicate the ends of major time periods; many examples verify that the same posture is again represented (fig. 3.17d), although the bone element that lies within it or dangles from the outstretched index finger (cf. Thompson 1950:fig. 32-5) may indicate a phonetic or semantic difference from Pom9 and from the sign in Glyph D. To summarize, Pom9 depicts the same action as T710 or a related action, and it also represents at least one of the same words as T710; T710 and Pom9 are both "hand-scattering" signs and have overlapping, if not identical, referents.[13]

---

[11] Thompson (1950:193–194) argued, on the basis of accompanying depictions, that the sign referred at least mainly to the sprinkling of water. Stuart (1984 and this volume) also argues that the reference is exclusively or primarily to the sprinkling of liquids, based partly on that restriction for pTz _*mal_. While not quarreling with the possibility that the substance cast was liquid in some cases, we believe, with Kelley (1976:51–52), that both solids and liquids were probably within the domain of the sign and perhaps of the verb _*mal_. This is semantically plausible, for, in Mayan languages, a single term may refer both to the sprinkling of a liquid and to the scattering of particles, as in Colonial Yucatec *wek'* ~ *wek*. As a result, cognate terms may refer to the sprinkling of a liquid in one language and to the scattering of grains in another; for example, pCh _*weč_ has reflexes meaning 'to spill liquids' in Chontal (Justeson 1979a) and Chorti (Schumann 1978) but 'to scatter (seeds)' in Chol (Aulie and Aulie 1978:129). The restriction of _*mal_ to liquids in Tzeltalan seems firm for that group of languages, since its Tzeltal and Tzotzil reflexes mean 'sprinkle, spill' without 'scatter' alternatives; however, a cognate probably once existed in Cholan, since some of the hieroglyphic evidence for the term comes from the Cholan site of Palenque, and the Cholan form could have had a broader or different range of meanings. Evidence of such a Cholan cognate may

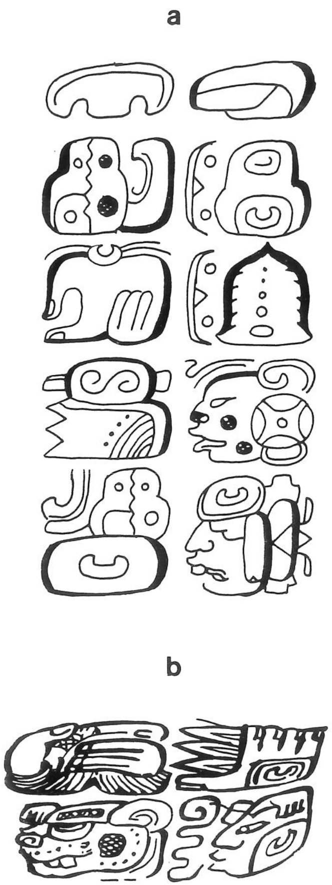
All Mayan verb roots meaning roughly 'to scatter (particles)' and/or 'to sprinkle, to spill (liquids)' are transitive, so Pom9 in this meaning probably represents a transitive verb. The transitivity posited for Pom9 is verified in the Covarrubias text (fig. 3.18a). There, the hand sign is followed immediately by a T212ms maguey-spine per-

---

be preserved in Cholti ⟨milquin⟩, 'diviner (with corn, etc.)' (Morán 1695:68), if the ⟨mil-⟩ element is assimilated from **mal* because of the following ⟨quin⟩ element; however, the details of an etymology based on this hypothesis are uncertain (if not problematic), and an equally viable alternative is available in **miˀ-il k'in*, based on Cholti *miˀ*, 'father.' Finally, what appears to be the same sign as Pom9, though lacking the outstretched index finger, appears in the Dresden New Year's pages in association with offerings of incense, both *pò·m* (Lounsbury 1973:107–111) and Landa's ⟨chahal te⟩ (Love 1986a, 1986b), the latter perhaps as *čika·x* resin.

[12] This compound was actually one of the examples cited by Schele and Stuart (as T710) as evidence for the *mal* reading of T710.

[13] Several other signs, not equatable with T710, appear to depict the same hand posture as Pom9, again from different viewing angles. The natural posture corresponding to that depicted by Pom9 is one with the thumb and index finger curling toward each other, roughly in a semicircle, with the remaining fingers tucked into the palm; the viewing angle is from the palm side. T671 represents a posture that is effectively identical (except that the index finger is perhaps less extended) but is viewed from the opposite side. There is more than a postural basis for identifying these signs with each other. T671 appears in one rather rare graphic context, with the affix T86 above and the circumfix T325 flanking either side; in this context, it substitutes for T704. The latter depicts a human torso, with the arm presented in a twisted posture and the centered collar diagnostic of Pom9 at the base of the (missing) neck. T704 depicts the left arm, while T671 and Pom9 depict the right hand, but this difference is probably not significant; Maya signs normally face toward the left, and this constraint, along with the viewing angle and position, determine the selection of right versus left. We do not know the meaning of T671 in this context, or that of T704. This evidence does not establish a semantic identity for these signs, but their sharing of the same context suggests that they are at least members of the same grammatical class; because that context is defined by referential morphemes, they probably fall within the same semantic domain. The same may apply to Pom9.



3.18 a. Early text. (Redrawn after Covarrubias 1957:fig. 94.) b. Shell trumpet text, sacrifice passage (C5–D6). (Redrawn after M. D. Coe 1982a:123.) (Drawings by John S. Justeson.)

forator,[14] which takes a sign for the possessive pronoun *u-* as prefix. Following this is a nominal phrase that includes names and titles, presumably identifying the subject of the verb and the possessor of the perforator; the sentence seems to read "*N X*'s his perforator." The perforator is the direct object in this construction; thus, the activity being described apparently relates to ritual (self-?)sacrifice.[15] This association is confirmed in the shell-trumpet text (fig. 3.18b): the sentence immediately following the one beginning with the Pom9 verb itself opens with the T714 "hand-grasping-fish" verb for blood sacrifice (Proskouriakoff 1973); this verb is followed by T218b, another sacrifice verb, which depicts a hand grasping a sharp, three-pronged implement. The hand posture of T714 sometimes agrees with Pom9 and sometimes with a back view of T710.

Our conclusions concerning the meaning of the verb in Unit 5 provide a basis for resolving the syntactic role of the noun in Unit 6 (the long-lipped god) as a benefactive (indirect object). Were *tiʔ* + long-lipped god to represent a preposition + status construction, such as Chol *k-oč-el ti hwes*, 'he becomes judge,' the verb to which it was a complement would have to be in the semantic range of a change of state; it is inconsistent with a verb for casting, scattering, or sprinkling, or with actions of the hand or arm in general. Our identification of Pom9 as a transitive verb root also indicates the syntactic role of Unit 7, the Corn God. In the absence of an intransitivizing derivational suffix, the verb is expected to take a direct object. Indeed, Bricker (1986a) identifies T93 in Classic inscriptions as the object of the verb, a conclusion verified by Love's (1986a, 1986b) independent analysis of the New Year's pages of the Dresden Codex.[16] The noun of Unit 7 is the only one available to serve as a direct object; this suggests that Unit 7 is part of the same sentence as Units 3–6, not of the same sentence as Units 1–2. If so, it is tempting to see the compound in which the sign for the Corn God appears as referring to corn, and to interpret the sentence as 'the Sun God casts corn to the sky god'; corn is still cast to the Chacs in the *čá·h* = *čá·k* ceremonies. Since we have no evidence that intransitivizing suffixes were part of the glyphic repertoire at the time the text was inscribed, it is possible, in principle, that Pom9 was used not only for a transitive verb root but also for an intransitivized stem derived from it. In this case, Unit 7 could be the possessor of the noun of Unit 6, or conversely, but no attested meanings of the deity signs involved lead to sensible translations under this alternative. Another apparent alternative —for Unit 7 to be part of the first sentence rather than the second—is not syntactically viable (as will be shown below).

---

[14] Formal resemblance to the hand-scattering family of signs makes a meaning such as 'release' attractive, but others such as 'grasp' and 'thrust' would also be feasible, and consistent with the resemblance of both Pom9 and T710 to the hand posture in the T714 "hand-grasping-fish" sign.

[15] Although this is usually identified as a stingray spine, we see little resemblance between the form and this object; rather, it appears to depict a maguey spine, known to have been used in self-mutilation at the time of European contact.

[16] Justeson's earlier supposition (1984:322) that T93 represented a detransitivizing derivational suffix is almost certainly erroneous.

Our conclusions concerning the syntax of Units 3–6 indicate that the Pomona flare text represented an ancient Yucatecan language. In other Mayan subgroups, indirect-object constructions typically consist of a preposition followed by a possessed relational noun that, in turn, is followed by the (usually animate) indirect object. In Yucatecan, however, animate indirect objects are marked simply by the preposition preposed to the indirect object. Although the possessive prefix apparently was not represented consistently by the scribe who produced this text, relational nouns are roots that should have been available. Accordingly, the indirect-object construction appears to be consistent with Yucatecan syntax only. Similarly, the use of a reflex of pM **ar* as an auxiliary verb is a peculiarly Yucatecan grammatical pattern. Since the form documented on the Pomona flare appears to be the ancient, morphologically complex **ay-a·n*, rather than the later, unanalyzable pYu **yà·n*, the flare is written in pre-Yucatecan, that is, in a Yucatecan language spoken before the diversification of proto-Yucatecan. In one respect, the word order we infer is unusual in modern Yucatecan languages; normally, the direct object precedes the benefactive. Nevertheless, the benefactive can precede the direct object in Yucatecan. William Hanks provides us with a sentence exhibiting this order that closely parallels the inferred meaning and structure of the second sentence of the Pomona text:

h mè·n-eˀ,	*ú·č-ik*	*u-wè·k-ik*	*tiˀ yun¢lóˀb'*	*suhuy sakaˀ*
shaman	it occurred	he scattered it	to the gods	blessed corn gruel

'the shaman scattered blessed corn gruel to the gods'

One feature of the second predicate is anomalous in the light of normal Mayan grammar–the lack of inflection on the main verb following the auxiliary. An ergative pronominal prefix would be expected before the main verb unless that verb were intransitive and in the completive aspect. Neither condition for the exception holds in the case before us: Pom9 is a transitive verb, and the Yucatecan auxiliary *yà·n* is obligatorily followed by a fully inflected main verb in the incompletive aspect (with the *-ik* incompletive aspect suffix in the case of transitive verbs). Accordingly, we are led to the conclusion that verbal inflections (in particular, pronominal prefixes and aspect suffixes) are not marked overtly, at least with consistency, in this inscription, and perhaps not in contemporaneous Yucatecan writing. Derivational affixes are apparently represented, since the **-a·n* suffix of **ay-a·n* is such a one. This tendency to represent derivational affixes earlier than inflectional ones is a predictable characteristic of early writing (see below).

The First Predicate: Unit 1. If the first sentence has an expressed verb, it must be in Unit 1, since Units 7 and 2 are simple nouns; however, we have been unable to determine the syntactic structure of Unit 1—T673[552].60:188—from the signs that compose it, and, in particular, we do not find it possible to secure any portion of Unit 1 as a verb.

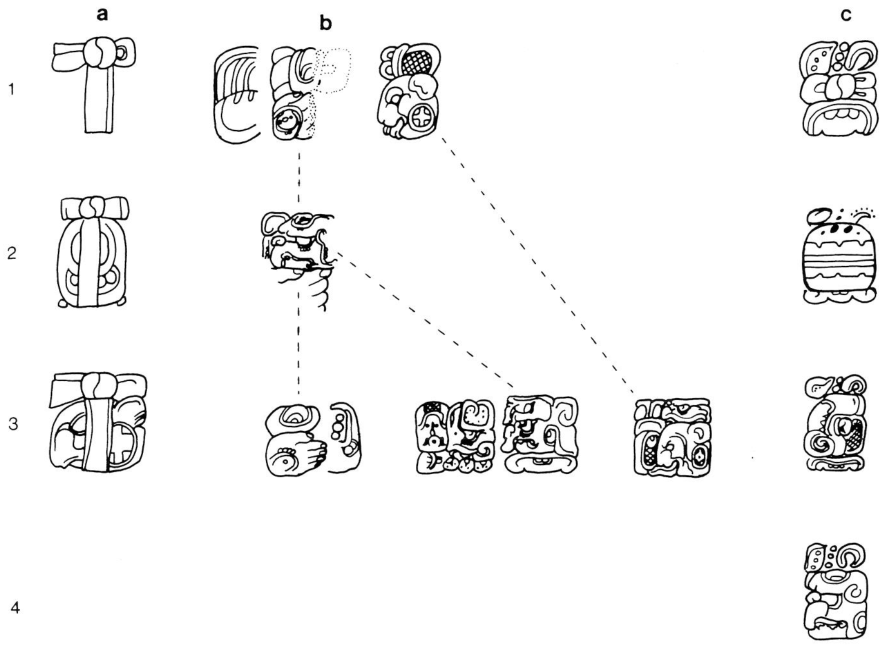
T673[552] occurs frequently, but neither nominal nor verbal status is clear in any context. T60 may represent a noun when T713 is suffixed and a semantically related verb when T23 is suffixed (Justeson and Norman 1982a); neither suffix is present here, so we do not know whether T60 in the Pomona flare text is a noun or a verb. The syntactic class of T673[552].60 is clarified by an example in an inscription at Yaxchilan, discussed below. It is in an appellative noun phrase, T115 + T673[552].60 + site name + *a·xa·w*, where T115 is an attributive (noun or adjective) modifying the remainder of the phrase. Either the site name + *a·xa·w* is a compound noun and the sole head of the noun phrase, or the site name is an attributive noun and *a·xa·w* is the sole head of the noun phrase. Only a substantive can intervene in a noun phrase between attributives and a sole head noun, so T673[552].60 must be a substantive, probably modifying the site name + title. However, this does not exclude the possibility that the compound also represents a verbal noun or a verb derived from a noun by an unrepresented infix.

Phonetically, T188 would later represent the syllable *le*. It is suffixed to a sign read *axaw* (Yucatecan) or *axwal* (Cholan) in Classic-period accession compounds. Kelley (cited by Schele 1979a:14) interpreted it in this compound as representing a noun root ⟨le⟩ for 'lineage' or 'succession,' an interpretation accepted by Schele (ibid., 1984b:303). It is now generally accepted, however, as spelling the grammatical suffix *-lel* or *-el* of Cholan *axwalel* (from **axaw-al-el*), 'rulership,' attested in a Colonial Chontal text syntactically parallel to the Classic passages. In this case, it is spelling the grammatical suffix to a noun, but there is also evidence that verbs, such as T765 for pYu, **ok*, pCh **oč*, 'to enter' (see Schele 1984b:301ff.), take T188 as a suffix. This is as expected linguistically, if we are correct in interpreting the sign as spelling *-el* rather than *-lel*,[17] since **-e·l* was an incompletive suffix on intransitive verbs that developed this function in pre-Cholan and diffused into Yucatecan (cf. Kaufman and Norman 1984:93–94). If T673[552].60 is a verb, the suffixed T188 for *-el* confirms that it is intransitive.

Although the syntax of Unit 1 is opaque, its approximate meaning can be ascertained. T60 signifies the attainment or holding of political office in the major contexts of its occurrence. With a strap attached (fig. 3.19a:1), it serves as the verb root in two types of accession compound. The more common occurrence is T684a, the "toothache glyph" (fig. 3.19a:2), identified with accession by Proskouriakoff (1960). It is a compound of the strapped T60 with an infixed T683b. T683b is identical in value and related in form to T181. Both are read *ax* and serve normally, as in T684a, as a grammatical suffix expressing the perfective or passive of verbs; this function identifies the strapped T60 as a verb stem. The other cases of T60 with a strap are forms of T684b, which consists of any animal-head sign infixed to strapped T60. Proskouriakoff showed that these, too, refer to accession when the infix is a vulture head, which is, at least in most cases, a head-variant for the preposition that often precedes T684a; these cases are simply variant spellings of the T684a expression, its T683b infix displaced to suffix position (as T181). One instance of T684b that is genuinely distinct from T684a is the verb opening of the brief text of Piedras Negras Lintel 2:K'1-L'1 (fig. 3.19a:3). Fox and Justeson (1977a, 1986:n. 31) interpret this text as stating that the two-and-a-half-

---

[17] Mathews (1979a) read T188 as phonetic *le* for -(V)*l-el* in the *axwalel*, 'rulership,' compound; subsequently but independently, Bricker (1985) and Dütting (1985) came to the same conclusion. In the published version of Mathews's paper, he and Justeson (Mathews and Justeson 1984:219–220, 227–229, 230) provide the evidence that the sign was to be read as *-el*; this evidence includes alternations with other -V*l* suffixes in parallel passages involving other titles.



3.19 T60 and its substitutes. a. With strap: 1. basic sign form; 2. in T684a, Dos Pilas Stela 8:C18b; 3. in T684b, Piedras Negras Lintel 2:L'1. b. 713/757 accession compound: 1. usual form, from Palenque Tablet of the Slaves, A5; 2. with T1030o in place of T60, from Chinkultic monument now in Tuxtla Gutiérrez Museum; 3. expanded form, Palenque Palace Tablet O1–P2. c. Glyph F, with central element being: 1. T60; 2. T609; 3. T740; 4. T1030o (2–4 redrawn after Thompson 1950:fig. 34-*58*, *62*, *67*). (Drawings by John S. Justeson.)

year-old future ruler of Piedras Negras (Proskouriakoff's Ruler 3) was being designated as heir to the throne of Ruler 2; alternatively, it may refer to his anticipated accession. The sign bound by the strapped knot in this instance is T757, which normally represents the syllable *b'a* or morphemic *b'ah*; we presume that it functions here as a grammatical suffix such as the Yucatecan passive suffix *-b'a*, or as a phonetic complement or semantic determinative. Most other instances present the name of a Palenque ruler dubbed "Hok" and "Kan-Xul"; use of a word as a name provides no evidence for its meaning in other contexts.

Without a strap, as it occurs on the Pomona flare, T60 appears in the "713/757" compound (fig. 3.19b). Mathews and Schele (1974:64) argue that this compound "stands in some way for accession," and they show that it represents an event occurring, on dates otherwise known to be dates of accession, to the person otherwise known to have come to power on those dates. The compound consists of two parts. The invariant portion of the first part of the compound is T60:713a. Varying verbal affixes directly precede or follow this compound, including various signs for the pronoun *u-*, T679a (for *iwal*, according to Justeson and Norman 1982b, and Linda Schele, personal communication, 1985), and the T181 suffix for *-ax*. This identifies it as the verb stem. This compound is normally the first glyphic material following the date, the usual position for the verb in hieroglyphic inscriptions containing both dates and verbs. The second part of the 713/757 expression is a T89 prefix for the syllable *tu*, followed by T757. T89 here represents *t-u-*, 'at its . . . ,' since, optionally, a logogram for the possessive pronoun may intervene between T89 and T757. This *t-u-b'ah* compound is optional, not occurring, for example, on Tikal Stela 31. It appears to represent a prepositional phrase (either a locative or a benefactive expression), for a pronoun should not intervene between the preposition and either a status or an imbedded clause. This second part of the 713/757 compound, therefore, is not a part of the verb; the verb in the expression must appear entirely within the T60:713a compound.

A number of other compounds, in which varying signs or compounds are prefixed to T713a, also function as verbs, with the overall sense carried by the variable prefix. Semantically, this recurrent usage indicates that the accession-related meaning of the 713/757 compound inheres in the T60 superfix. This conclusion is supported by instances in which the 713/757 compound occurs with T1030o in place of T60 (fig. 3.19b:2), a substitution also found in other contexts. T1030o is the sign that Schele identifies as the "Jester God," a symbol of secular authority; Mathews and Justeson (1984:210–211, 219, 229) identify the sign as also the name for an office. Syntactically, the recurrent use of varying signs or compounds prefixed to T713a, with the whole serving as a verb, points to the prefix position as a consistent grammatical slot, the forms that occupy it constituting a single grammatical class. Justeson and Norman (1982a) argue that the class membership is that of nouns; if so, T60 functions as a noun in this case. This is verified in certain passages using a different accession compound, T617:713a, the "mirror-in-hand" compound; some of these instances include T1030o in a noun phrase serving as the subject of the mirror-in-hand verb, preceding the *t-u-b'ah* compound (fig. 3.19b:3).

T60, again without a strap, is the central sign in Glyph F of the Supplementary Series. The prefix of Glyph F, T128, is an inflected main verb meaning '(it) has ended' (Justeson 1981); the following portion of the Glyph F compound, usually T60:23 (fig. 3.19c:1), is best analyzed as a noun specifying what has ended. In Glyph F, T60:23 can be replaced by T740:23 (fig. 3.19c:3) and by the "grotesque" T1030o (fig. 3.19c:4) that Schele identifies as the Jester God, with or without T23 suffixed. The substitution of the Jester God for the birth logogram, both with T23 suffixed, is found also in the middle panel of the Temple of the Inscriptions at Palenque. Justeson and Norman (1982a) argue, on the basis of these and other contexts, that T23 sometimes serves as a suffix deriving nouns from verbs, and that it has this function specifically in the case of T740:23; if so, T60 represents a verb in Glyph F.[18]

The meaning of the verb in Glyph F can also be determined roughly. The immediately preceding compound, Glyph G, forms a single clause with Glyph F; Thompson (1929) identified it as representing a Maya equivalent of the Aztec Lords of the Night, with a new lord ruling over each night in a cycle of nine. Justeson (1981) shows that the structure Glyph G¿ + END-completive + T60:23 corresponds to 'God G¿, his X has ended' or 'God G¿ (has) completed his X.' Given Thompson's interpretation of Glyph G, what must have ended is the authority or patronage of the lord of the previous night, or the progress of his installation as patron or lord. Verifying this interpretation depends on showing its appropriateness in the examples of Glyph F in which other signs substitute for T60. Some such sense is supported by the rare occurrence of a jaguar mat throne sign (T609) in place of T60 in Glyph F (fig. 3.19c:2); by the mirror infix in some instances of T60 in Glyph G, in T684, and in the 713/757 compound; and by the use of T1030o as a symbol of secular authority.

The accession-related basis for the replacement of T60 by T740, the birth logogram, can be demonstrated through Barthel's (1968:136) identification of T60 with Colonial Yucatec ⟨hok⟩ (i.e., *xó·k'*). The Lowland Mayan word **xok'*, 'tied cloth, noose,' accounts for the form of the sign, a knotted cloth. Barthel cites a gloss from the Motul dictionary as evidence that ⟨hok⟩ also served as a verb meaning 'to put in office.'

---

[18] The appearance of both T1030o and T1030o:23 as functional equivalents of T60:23 indicates that T1030o represents a word closing with the grammatical suffix that T23 represents in Glyph F—presumably, a suffix having the phonetic shape -(G)*an* or -*na*(G). The substitution of T1030o simply for T60 in the 713/757 expression, but for T60:23 in Glyph F, provides further evidence for this. The variable presence of T23 as a suffix to T1030o in Glyph F is, therefore, consistent with the grammatical analysis above. An instance of Glyph F on Tila Stela 1 has T1030o:23.23, which suggests that the word represented may actually end in -*nan*, the last portion being the grammatical suffix and the earlier part indicating the phonetic ending of the root or stem.

> ⟨hokol ti uinicil⟩ . . . estar puesto en algún officio de república. ⟨Hoki ti vinicil in mehen ca oci ti batabil⟩, hicieron a mi hijo officio de república; hiciéronle cacique (Martínez Hernández 1929:395)

Kelley (1976:152) strongly endorses this hypothesis, although it is not widely accepted (see the listings in Justeson 1984:320). In fact, the verb cited by Barthel is a Yucatecan root *_xó·k'_ meaning 'appear, come out, emerge, sprout.' Since this general meaning can account for the Motul examples cited by Barthel, it is debatable whether the verb had a specific sense 'to put in office.' The Motul usage does, however, seem to reflect a genuine native historical tradition of specifically using the verb in accession statements, for it is so used in the _Book of Chilam Balam of Tizimin_: ⟨tu chicane ti hoki ahau⟩, 'he was manifested then, and appeared as lord' (Edmonson 1982:19). Given this substantiation for the reading of T60 as the verb *_xó·k'_ in glyphic accession contexts, it is of interest that the range of uses of this verb also encompasses 'birth' in Yucatecan languages (see Barrera Vásquez 1980:222; Ulrich and Ulrich 1976:108), again presumably based on its basic meaning 'appear.' Barthel's reading of T60 accounts for the substitution of T740 for T60[19] and thereby receives further support.

Since it is only the general sense 'appear, emerge' of pYu *_xó·k'_ that explains the substitutability of T740 for T60 in Glyph F, this is the specific meaning that we posit for T60 in this context. Through this meaning, the use of T740 in Glyph F accommodates the interpretation of T60 as indicating the acquisition or holding of office or rank

---

[19] The usual reading of the T740 'birth' glyph may have been pYu *_yíˀx_, pCT _yi·x_, ripen,' < pM *_ri·x_ ~ *_riˀix_, attested in all Mayan subgroups:

pM *_ri·x_ ~ *_riˀix_, 'ripe(n), old (person)':

Eastern Mayan *_ri·x_:	Pocomchi _rix-_, Kekchi _ti·š_; Mam, Teco _ti·š_
*_riˀix_:	Cakchiquel, Quiche _riˀx_
Greater Kanjbalan *_riˀx_:	Jacaltec, Tojolabal _yih_; Motozintlec *_čiˀh_
Cholan-Tzeltalan *_yi·x_:	Tzeltal, Tzotzil _yix_
Yucatecan *_yíˀx_:	Yucatec _yíˀx_
Huastecan *_rex_:	Huastec _yeh-_, Chicomuceltec _yeh-_

Sources: Martínez Hernández (1929:454); Fisher (1973:354); Fox (1978:180); Kaufman (1967:31, 1969:162, 1972:103, personal communication, 1984).

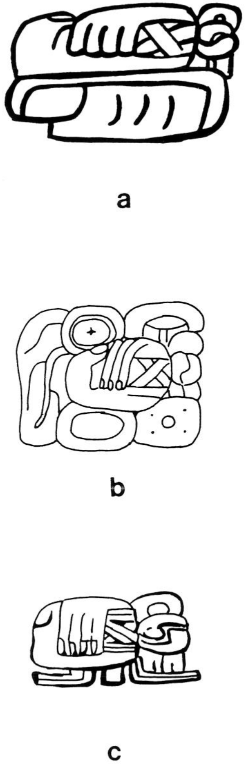
In Yucatec, T740 is used by extension as a verb meaning 'to sprout' and, presumably by extension, it refers to the birth of people or animals. A reading of T740 as *_yiˀx_, 'be born,' accounts for the use of the T125/126 (for _ih_ and _iy_) as a complement to the birth sign (as does pYu *_sí·h_). (This suffix may be based iconically on the nearly homophonous pYu *_yíˀh_, 'corn tassel' < pM *_hiˀh_, 'fresh corn.') What is particularly interesting about this reading is a further accord with the meaning of *_xó·k'_: _xó·k'_ is the verb used in Yucatec for the rising of the Sun; similarly, verbs meaning 'to sprout' are used of the rising of the Sun in other Lowland Mayan languages (e.g., Chontal _yét_, 'to sprout; to rise [the Sun]').

(e.g., 'he appears in the lordship') in Glyph F, consistent with the other signs substituting for T60 in the compound. An accession-related sense for T740 does not depend crucially on a *_xó·k_' reading for T60, however; other verbs in this general semantic area might accommodate both birth and accession. Although she does not accept the _xo·k_' reading, Linda Schele (personal communication, 1982) argues that the substitution of T740 with the Jester God outside of Glyph F supports a special connection between these two, making the association of the Jester God with accession sufficient to verify an accession-related function for T740 in Glyph F.

Partly because T60 sometimes functions as a noun (from which a verb can be derived) and sometimes as a verb (from which a noun can be derived), we can tell neither how it is to be analyzed grammatically in the T673[552].60:188 compound on the Pomona flare (fig. 3.20a), nor how the compound as a whole is to be analyzed. The consistent semantic association of T60 with the acquisition or holding of political power suggests that an accession-related meaning should be attributed to it in the T673[552].60:188 compound.

The use of T60 to indicate the acquisition or holding of secular power appears to be preserved in the two other instances in which it occurs in a T673[552].60 compound. The more definite support comes from Yaxchilan Lintel 37:B6 (fig. 3.20b). Peter Mathews (personal communication, 1977) and Berthold Riese (1984) have proposed that a series of successive early rulers of Yaxchilan are named on this monument. The text records their accessions and indicates that rites were performed; it then reports activities of apparently contemporaneous rulers from other sites, all of whom bear a title T168:513.

A "Turtleshell" T626 ruler of Piedras Negras is among those feting the seventh and eighth rulers at Yaxchilan. The Emblem compound immediately following the first citation of his name is typical for Piedras Negras, T115 + T168 (for _a·xa·w_, 'lord, ruler') + site name. T115, a variant of the "water group" specific to the Piedras Negras Emblem, is generally recognized as representing a substantive modifying the site name or site name + title compound; Mathews (in Mathews and Justeson 1984:213–215) has shown that T168 represents a following rather than preceding word *_a·xa·w_. The entirety is an appellative designating Turtleshell as ruler of Piedras Negras. In the second reference to this ruler, the T673[552].60 compound intrudes between the T115 modifier and the site name within the Emblem appellative. In view of the timing of the reference, the compound is less likely to refer to Turtleshell's accession than to his tenure in office; since Turtleshell is the only one of six visiting rulers mentioned twice in the sequence of lintels constituting this text, the compound may refer explicitly to the continuation of his tenure at Piedras Negras upon this second Yaxchilan inauguration. The position and curvature of the thumb and fingers in T673 suggests that they hold a cylindrical object, for example, the staff of certain symbols of authority; the compound may relate to the holding of a symbol of power.


a

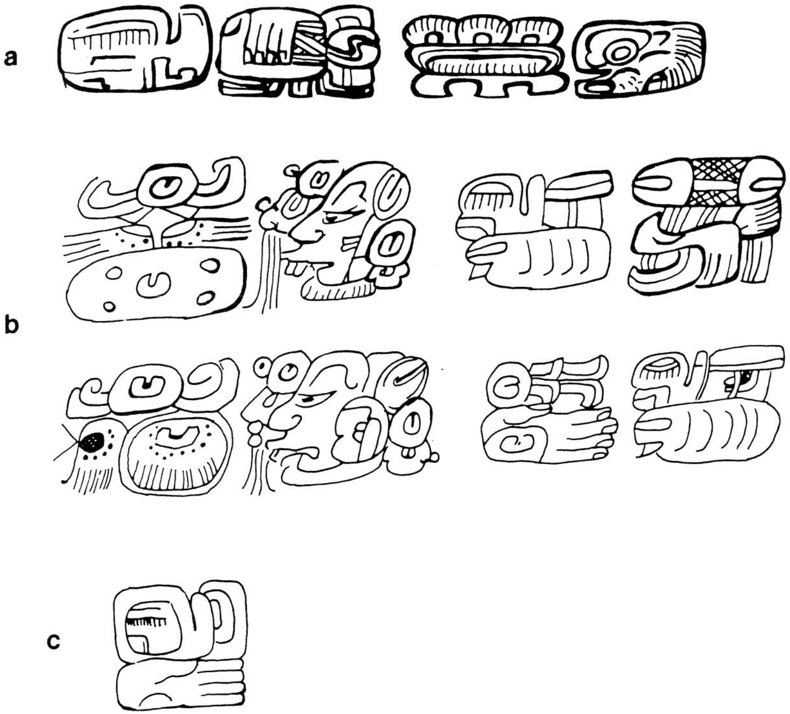
b

c

3.20 T673[552].60 compounds. a. Pomona flare, A, u.h. b. Yaxchilan Lintel 37:B6. c. Shell trumpet, B5. (Drawings by John S. Justeson.)

Inconclusive evidence suggests that the T673[552].60 compound is related to accession in its other occurrence, on the shell trumpet text (fig. 3.21a). We analyze the first two columns as comprising two sentences, the second beginning at A5 with a glyph block consisting of the single sign T669. Almost all occurrences of T669 in Classic Southern Lowland texts represent a verb root; this suggests that T669 functions as such on the trumpet. It is followed at B5 by the T673[552].60 compound; at A6 by a locative noun (note the T51 locative preposition preceding it at B3, and several codical instances in which it serves as the location of a deity); and finally at B6 by a boar sign that closes the sentence and is presumably a noun (probably the subject of the sentence). T669 could function as an auxiliary verb here, with T673[552].60 the main, probably intransitive, verb of the sentence. Such a function is phonetically plausible—given the phonetic reading of the sign as *ča* (Fox and Justeson 1984:18–24)—for Kaufman and Norman (1984) reconstruct a proto-Cholan auxiliary verb **čaʔ*-le, 'to do, to make.' In the other instances of the use of the sign, however, it serves as the main verb of its sentence, so this is the more likely analysis. In this case, T673[552].60 is most likely a noun phrase, probably the object of the verb. This verb seems to relate in some way to accession. M. D. Coe (1973:110) illustrates an incised Tzakol 3 tripod vessel that bears two separate but closely related texts in separate panels (fig. 3.21b). Each panel contains a glyphic compound in which T669 appears in place of a sign for *po* or *aw* in the T168:188 *axwalel*, 'rulership,' compound of accession statements. The prefix, therefore, has the structure of many Early Classic titles of the form *ax* + X, the X element distinguishing different royal titles, such as **a·xa·w*, *#ax-kan*, *#ax-k'i·n*, and *#ax-pohp*; it apparently indicates a noble title to which someone acceded. This is verified in the panel in which the T669 compound is preceded at C2 by T60:713, for accession. Since T669 represents a verb root, the *ax*-X compound is an agentive noun, specifying a person or occupation who performs that act. In the shell inscription, T60 and T669 exchange grammatical roles: T60, rather than T669, takes grammatical affixes and serves in a noun compound rather than in the T60:713 verb, while T669 moves from the noun (title) compound to serve as the verb. This sort of exchange of grammatical roles presumably affects the stated relationship of the writer or reader to the topic, but it leaves the basic semantic relationships of the referenced elements unchanged. Thus, while the details are not clear, the exchange of grammatical roles of the basic roots, along with the focus on accession in the statement at C2–D2 on the tripod vessel text, suggests a similar meaning for A5–B5 on the shell trumpet text. Finally, the same T669:713 verb is the sole verb (fig. 3.21c) on the so-called "Po Panel," a monument attributable (Mathews 1978) to Bonampak; the depicted ruler of Bonampak appears to be the subject, referred to both by name and by his relationship to another ruler. The scene shows the rulers sitting on signs for *po*, which are used iconographically for rulers' mats of authority (*pohp*).

We conclude that Unit 1 indicates the bearing of power, authority, dominion, or



3.21 a. Shell trumpet text, A1–B4. b. Tripod vessel text, A1–B2, C1–D2. (Redrawn after M. D. Coe 1973:no. 60.) c. Verb at D3 on panel attributed to Bonampak ("Po Panel"). (Drawings by John S. Justeson.)

patronage tantamount to rulership. Since the other possible portions of the first sentence are simple referential nouns, Unit 1 is the semantically basic portion of the predicate of the first sentence (probably as a noun phrase), enabling us to resolve the roles of Units 7 and 2.

Were Unit 7 a member of the first sentence, it would be the first member; its membership as the first part of a sentence would imply that it was a possessor noun. Since the first syntactic constituent of the first sentence should be the predicate of the sentence, Unit 7, were it a member of this first sentence, should be part of the predicate. In Mayan languages, a possessor noun in initial position in its sentence cannot form a single syntactic constituent with the noun it possesses; only when the word order is possessed noun + possessor noun can the two make up a single constituent. Thus, a noun possessed by Unit 7 could not be part of the predicate, which is a single syntactic constituent, were Unit 7 part of the predicate. Either Unit 1 or Unit 2 would have to be the possessed unit excluded from being part of the predicate; the other would have to be the subject of the predication, thus also excluded from forming a part of the predicate. Accordingly, were Unit 7 a member of the first sentence, it would have to form the complete predicate of that sentence; such a nominal predicate would have to be a nonreferential noun[20] in a stative or equational sentence. We have seen, however, that Unit 1 provides the basic meaning of the predicate of the first sentence, and so is part of the predicate. Since Unit 7 could be part of the first sentence only if Unit 1 were not, we conclude that Unit 7 does not open the first sentence but rather closes the second. This supports our earlier conclusion that Unit 7 is the object of the transitive verb of Unit 5.

The first sentence consists, therefore, of Units 1–2. With Unit 1 providing the predicate, Unit 2 must serve as the subject of the sentence. This predicate + subject composition is the most typical structure for the first sentence of a Mayan narrative. The sentence can be loosely interpreted as stating that the Sun God is the bearer of some kind of secular power. The second sentence appears to indicate that he also performs some sacrificial rite involving the Sun God and the long-lipped god—most likely that he cast corn for the sky god.

CONCLUSIONS

Epigraphic Method

We have treated the hieroglyphic text of the Pomona flare as a straightforward linguistic text, with the proviso that certain grammatical morphemes required in speech are not always, if ever, indicated in the script. Exhaustive analysis of the possible and plausible syntactic structures of the glyphic text establishes some features of its organization that other types of epigraphic analysis do not illuminate. Correlations among discourse context, word order, and the syntactic roles of the constituents of sentences in Mayan languages have proven especially fruitful in limiting the range of alternatives that have to be considered.

This methodology has advanced our understanding of an initially intractable Preclassic hieroglyphic document much further than we had initially expected. Its promise is all the greater for elucidating problematic aspects of hieroglyphic texts from the Classic era. These later texts normally include significant epigraphic clues to sentence boundaries and a fuller expression of grammatical morphemes; in addition, there are a greater number of closely comparable texts to constrain both semantic and syntactic interpretation. Besides contributing to the analysis of individual texts, this approach should promote the recovery of new information concerning Lowland Mayan languages in the Classic period.

---

[20] That is, it must not specify a particular entity in the world. For example, the Corn God sign cannot be taken as representing a quality or domain of power of the Corn God, such as 'fertility.'

The Meaning of the Text

"The holder of power is the Sun God; the Sun God casts corn to/for the sky god." This, we believe, is the overt message inscribed on the Pomona flare. Presumably, there is a connective sense to these assertions: either the Sun God holds power by virtue of performing these acts or he performs these acts by virtue of holding power. Some such connection is suggested, in any case, by the performance of comparable rituals by Late Classic Maya rulers during year-ending ceremonies, and, in particular, by the possible relation of the text of the Pomona flare to that of Yaxchilan Lintels 23, 48, 47, 34, 49, 37, and 35. The second connection would be more consistent with our inferred sentence order and with the attribution—via the auxiliary verb *ay-a·n*—of obligation or existential necessity to the performance of the scattering ritual.

This overt message is still somewhat elusive; ostensibly, secular political statements relate to divine beings. It is possible that activities are imputed to deities in this text, as in the mythological portions of the texts of the temples of the Cross Group at Palenque; if so, the import (as at Palenque) is doubtless for secular rulership. It is equally likely that the statement involves actual or metaphorical apotheosis and refers to the status or to the powers of rulership, or to historical persons having the status or filling certain of the roles associated with specific deities or symbols of power. In either case, the text provides the earliest known hieroglyphic evidence for the association of sacred ritual with the acquisition of secular power; we take it as a claim of sacred justification for the secular political activity of the Lowland Maya elite.

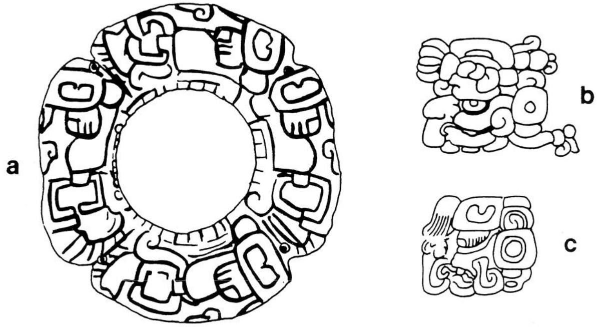
We feel that a similar sacred metaphor for secular power, or overt sacred patronage, is probably involved in the apparent secular associations argued by Freidel and Schele (this volume) for deity masks on Preclassic architecture roughly contemporaneous with the interment of the Pomona flare. Barthel's *xó·k'* reading for T60 provides a rationale for the Sun God's being named as the one who acceded (literally, 'emerged') as ruler: this is the verb used to describe the rising of the Sun, and the Pomona text is thereby able to record a secular accession even more completely in the guise of sacred action. William Hanks (personal communication, 1983) points out that there is today a Maya belief in four high gods in the cosmos who guard four temples in the four directions, and they are referred to as the *h k'ì·n*. This quadripartite solar deity is at the top of the cosmology and would be the loftiest and most powerful sacred model for secular authority; such a belief may be reflected in the Classical Yucatec word *#k'in*, 'to rule,' with derived forms meaning 'to command' (Martínez Hernández 1929:513, 515; see also Barrera Vásquez 1980:401). Hanks also notes that these deities are considered by the shaman with whom he worked to have been historical personages, former secular rulers—again, pointing to the connection of the sacred with secular power. The Sun may have been the preeminent sacred symbol of secular authority.[21]

The meaning of this text may also be related to the function of the four jade bib-and-helmet heads recovered from Late Preclassic caches at Cerros and Nohmul, given the correspondence of the entities depicted by these heads to the deities cited in the text of the Pomona flare. At Pomona, the burden of distinguishing among the participants and specifying their roles may have been shifted to the hieroglyphic text, for the jade figures surrounding it all had bib-and-helmet head type A. With the ritual or symbolic function of the heads related to that of the large central object in the deposit—at Pomona, the flare—and their symbolic identities named in the text, the caching of the figures (or the heads) may have expressed ritually a set of activities and prerogatives similar to that expressed linguistically in the text of the Pomona flare. The text may refer, at least in part, to this ritual; if so, the text was inscribed on the occasion of a burial, or in anticipation of one, and the interplay of sacred with secular statements might relate to the apotheosis of dead or dying rulers. Alternatively, the text may have been inscribed and the flare used in connection with the accession of one or more rulers, or with rituals of rulership; if so, the ritual of deposition of the figures may have manifested the flare's message or reenacted the historical accession of the dignitary buried in Tomb I, and any apotheoses would be associated with these earlier events.

Parallels to the content of the text of the Pomona flare are found in texts on other items ostensibly of personal adornment. Other early Maya ear-flares bearing text essentially name rulers via their titles and parentage—that is, they justify the legitimacy of the rulers. Other inscribed jewelry includes strings of beads (necklaces, bracelets) and plaques worn along the belt; their content is comparable to that of ear-flares, except that they include references to accessions, ritual (auto)sacrifice, and the casting rituals that were evidently prerogatives of rulership. One especially intriguing item, identified as Preclassic on stylistic grounds by Mathews (1985), is a scalloped ear-flare in a Cincinnati collection (fig. 3.22a); it has four "*tun*"-god faces (cf. fig. 3.22b) incised

---

[21] This interpretation of the Sun God reference renders viable a stative interpretation of Unit 3 or Unit 7 as constituting a dependent clause (see note 8), one for which alternative syntactic structures would not be far more plausible. If the word "because" introduced the clause but was not represented, the second sentence could read, literally, '(Because) he is the Sun, he must cast (it) for the sky god, the Corn God'; that is, because the Corn God is the Sun, he must cast ritually for the sky god. It is a problem for this hypothesis that Lowland Mayan words for 'because' (pYu **t-u-men*, pTz **ta-s-kax*) have the structure of possessed nouns in prepositional phrases; they are as readily representable as indirect objects. Furthermore, secular rulership is not a guise for the Corn God that has support in what survives to us of Maya cosmology, while the casting of corn to and for the Chacs is an ancient and surviving custom; the more straightforward analysis of Unit 3 as the subject, rather than as a dependent clause introducing the second sentence, yields the more likely meaning.



3.22 a. Preclassic ear-flare, provenience unknown. b. Head variant for *"tun,"* Tikal Stela 6:A4. c. Tikal Stela 31:B16. (Drawings by John S. Justeson.)

around its outer surface. This flare may also have been involved in the bib-and-helmet ritual complex, the four inscribed deity heads relating to the four type A figures associated with the Pomona ear-flare. If so, they suggest that more deities than those on the Pomona flare could sometimes be involved in the rituals, with perhaps ritual roles rather than sacred identities being specific to each head type. As one of the patron deities invoked in the opening passage of Tikal Stela 31 (fig. 3.22c), which recounts Tikal's early dynastic sequence, the *"tun"* god may also have been a patron of secular authority. He is evidently associated with the Sun God; as far as we know, the eye infix on the Cincinnati flare is an early, optional feature occurring mainly on the faces of the Sun and *"tun"* gods.

Further insight into the meaning of the Pomona flare may come eventually from its possible thematic relations with the text on the shell trumpet and that on Yaxchilan Lintel 37 and the other lintels in this series. These three texts are the only ones having the T673[552].60 rulership compound. The flare text and that on the trumpet also share the same main verb, Pom9, in another of their sentences. This verb may appear at A3 and C1, in the same sentence as the rulership compound, in the Yaxchilan text as well. The sign appearing there is designated T220 by Thompson (1962), a designation also encompassing the affix form of T710 (the standard "scattering" sign). Either these instances of T220 are examples of Pom9 or they are closely related to it. They depict the same posture as Pom9, differing in viewing angle; Pom9 shows similar variation in Glyph D of the Lunar Series, and, in one example at Palenque, T220 is viewed from the palm side (fig. 3.17b:1; cf. fig. 3.17a:2). As a monument presenting a dynastic history of Yaxchilan through ten rulers, the Yaxchilan text reinforces the power associations of the Pomona text. Except in the T673[552].60 compound, the rulership ties of the shell trumpet are not so overtly expressed that we detect them glyphically. Rather, this text has a sacrificial or offertory emphasis: the sentence after that opening with

Pom9 opens with the "hand-grasping-fish" verb, associated with a "hand-grasping-perforator" sign; the T669 verb that opens the sentence with the T673[552].60 compound functions as a verb for blood sacrifice in the Madrid Codex (Fox and Justeson 1984:28); and Pom9 is also overtly associated with bloodletting in the Covarrubias inscription, in which the maguey-spine bloodletter is the object of the verb. These sacrificial associations may involve the rulership connotations suggested by the T673[552].60 compound, however. Bloodletting rituals appear to have been an elite prerogative in Postclassic Yucatan; iconographically, the shell trumpet depicts a young lord seated on an abbreviated spelling for *pohp*, 'mat of authority.' It may be that T673[552].60 refers directly to sacrificial rites as well as to rulership.

Geographic Origin

Although the flare was recovered archaeologically from a tomb at Pomona, in Belize, its ultimate provenience is uncertain. Preclassic jades appear to have circulated widely; extreme cases include the discovery of an Olmec jade in a Late Classic Maya tomb on Cozumel Island (Rathje, Gregory, and Sabloff 1973) and the discovery of an albite figurine in a similarly late grave at Laguna Francesca, Chiapas (Gussinyer and Martínez 1976/77). J. A. Graham (1971:136) has suggested that the fact that the Pomona flare is "one of the largest jade flares ever discovered, in itself would declare its heirloom status." For the time being, however, it appears most likely that the flare was a product of Belize. In general, early Maya ear-flares appear to be concentrated there. More specifically, the deities named in the text seem to correspond to the jade heads recovered from Late Preclassic caches at Cerros and Nohmul, as well as to the Pomona figures; the complex of which they are a part is restricted to Late Preclassic Belize, according to present knowledge.

Language History

The text of the Pomona flare documents the antiquity of two grammatical constructions in the Yucatecan branch of the Mayan language family. The use of the *tiʔ* + benefactive construction had already begun at least 700 years before proto-Yucatecan broke up (ca. A.D. 950)—the earliest its use could be inferred on comparative linguistic evidence alone; the same may be said for the use of *ay-a·n* as an auxiliary verb. In contrast, the phonetic development of **yà·n* from early Lowland Mayan **ay-a·n* probably took place between the time the flare was inscribed and the breakup of proto-Yucatecan; it was most likely a Classic change.

The addition of *-*a·n* to **ay* appears to be a pre-Cholan innovation. Because it is reflected in the text of the Pomona flare, the innovation took place before the end of the Late Preclassic. This inference allows us to date the diversification of Cholan–Tzeltalan into separate Cholan and Tzeltalan branches. Some time must have passed after the separation before the Cholan branch innovated the *_-a·n_ suffix, and perhaps even more time elapsed before it was adopted with *_ay_; additional time must have passed before pre-Cholan *_ay-a·n_ was borrowed into Yucatecan and became firmly established in the dialect in which the flare was written; and still more time must have passed before the Yucatecan term was written down in this text. Allowing the bare minimum of a century to accommodate all these changes, proto-Cholan–Tzeltalan can hardly have separated any later than ca. A.D. 150; this date is in line with Kaufman's (1974:85) glottochronological calculation that the separation occurred at least nineteen centuries ago.

Finally, some of the intensive interaction between speakers of Lowland Mayan languages, which resulted in massive linguistic diffusion from Cholan into Yucatecan, was already well along during the Preclassic. Since the breakup of Cholan-Tzeltalan occurred before ca. A.D. 150, the large-scale diffusion between Cholan-Tzeltalan and Yucatecan (which probably occurred largely when Cholan and Tzeltalan still formed a single speech community) must have begun by the beginning of the Christian era at the very latest.

The Early History of Mayan Writing

Yucatecan speakers apparently received hieroglyphic writing from Cholan or Cholan-Tzeltalan scribes (Justeson and Campbell 1981; Fox and Justeson 1982). Since our dating of the deposition of the Pomona flare indicates Yucatecan literacy, at the latest, by ca. 8.5.0.0.0–8.12.0.0.0,[22] Cholan or Cholan-Tzeltalan literacy very likely goes back to the era of the Cycle 7 monuments. Cholan-Tzeltalan (and perhaps Yucatecan) literacy was most likely contemporaneous with the (probably largely Mixe-Zoquean) literate traditions of Greater Izapan civilization. Certainly, Lowland Mayan literacy must extend back at least to the time of Abaj Takalik Stela 5 (ca. 8.4.5.17.11, A.D. 126); it is suggestive that J. A. Graham (1979) and Quirarte (1979c) associate this monument with the Lowland Maya stylistic tradition rather than with the Izapan.

---

[22] There is also indirect evidence for Terminal Late Preclassic Yucatecan use of the script in the history Fox and Justeson (1982) infer for T671. This sign represents the day *Manik* logographically and the syllable *či* phonetically. The day name in Yucatec is clearly ancient (Justeson et al. 1985:22). It corresponds to the day Deer of other Mesoamerican calendars, and the sign is used logographically for 'deer' in the Maya codices. Although Kelley (1976:181) speculates that the sign represented the syllable *ke*—the expected generalization of the logographic value of the sign—there is no evidence for such usage, while there is decisive evidence for the phonetic value *či*, which presupposes the Cholan-Tzeltalan *_čihx_ term. This pair of values therefore indicates a stage of use for the sign in Cholan or Cholan-Tzeltalan before it was adopted for 'deer' in Yucatecan. Such a stage does not account, however, for the form of the sign, a curling hand. Seler (1904:30) pointed out that the sign depicts a Maya gesture meaning 'to eat': "When we travelled in Huaxteca . . . the invitation to eat, Vamos a comer, was invariably accompanied by a gesture in which the hand, bent in the style of the glyph Manik, was repeatedly carried to the mouth. . . . In Maya [Yucatec] 'to bite', 'to eat', and 'to be bitten', 'to be eaten' is chi." DuBois (1978) has independently suggested that the sign was based on this gesture, which he observed among the Highland Maya of Guatemala. Evidently, this is a pan-Mayan gesture for 'food; to eat' that iconically mimics the action of eating small foods with the fingers; it suggests a relationship to pM *_tyiʔ_, pCT *_tiʔ_, 'eat meat, bite,' the phonetic value *či* being explained either through pYu *_čiʔ_ or pMm *_čiʔ_. In the absence of

The script of the Pomona flare can be compared with that of several other Late Preclassic hieroglyphic texts in Lowland Maya script. These texts evidence close similarities with each other and with the earliest Classic texts that are not found later. They are similar in the choice of signs and compounds and in the formal execution and organization of the texts. Resemblances involving the flare are discussed above, but there are other resemblances. A cyclopean notched "*ahau*," with a single dot in place of the usual paired eyes and no mouth element inside the lower inset circle, is a rare sign occurring on an inscription referred by Proskouriakoff (1974:fig. 12-7) to the Late Preclassic, although, admittedly, the evidence for this period versus early Early Classic is meager. The same sign appears in the Covarrubias inscription and in the plaques described by M. D. Coe (1982b; see *Rediscovered Masterpieces* 1985:figs. 330–333), and as the forehead element of T1031 in an early Early Classic inscription from Bagaces, Costa Rica (Balser 1974:pl. 13). The early Early Classic form of the gopher sign, T757, goes back to the Late Preclassic form of the tubular-bead inscription from Chichen Itza's Cenote of Sacrifice, changing to the more modern form toward the end of the Early Classic (the first instances of which are from 9.4.0.0.0, on Piedras Negras Lintel 12 and on the "Po Panel.") Proskouriakoff (1974:204) also noted specific resemblances between the Cenote jade text and that of the Leiden Plaque: "the omission of the border on the upper half of the "*tun*" sign, the three-part superfix of the fifth glyph, very similar

---

positive evidence for any Mamean innovations as bases for sign values (Justeson and Campbell 1981), the Yucatecan **čiʔ* form appears the most likely basis for the phonetic value of the sign. Accordingly, T671 apparently represented the word for 'to eat' via a depiction of the corresponding gesture, hence acquired the logographic use for roots phonetically approximating *či* in Yucatecan, and was subsequently borrowed into Cholan-Tzeltalan in rebus representation of Cholan-Tzeltalan morphemes of sufficiently similar phonetic shape; thereby, it represented 'deer' in Cholan and came to be used for the day Deer. Early in the Early Classic, the latter usage is attested on the Uaxactun murals, so the Cholan generalization must have taken place by that time. Indeed, since Uaxactun appears to have been Yucatecan in the Early Classic period, the Yucatecan adoption of the Cholan usage had evidently already occurred by the beginning of the Classic period; the Cholan development of the usage must have been earlier, and the Yucatecan development of the *či* usage earlier still. The initial stage of Yucatecan use of the sign, and thus of the hieroglyphic script, is almost surely a Protoclassic phenomenon. This scenario can be verified at least to the extent that the sign does appear, although seemingly not calendrically, on a Protoclassic text illustrated by M. D. Coe (1973:25, A7).

to that of the Initial Series Introducing Glyph on the Leyden Plate, and the use of U-shaped elements.'' The omission of the border of the ''*tun*'' is seldom found later, but there are parallels in every legible Preclassic instance of the sign (those on Abaj Takalik Stelae 2 and 5, Kaminaljuyu Stela 10, and Tres Zapotes Stela C). Similarly, U-shaped elements extend from the Late Preclassic into the second half of the Early Classic. The Late Preclassic script, like that in the first half of the Early Classic, had no non-rebus phonetic usage that we are able to detect. In several respects, there seems to have been a rather smooth transition between the Late Preclassic and the Early Classic hieroglyphic scripts.

Some aspects of the script were maintained until the entire system was stamped out by the Spaniards some fifteen hundred years later. The text of the Pomona flare, for now, provides a number of ''firsts'' involving just such features: the first records of Maya rulership, though not necessarily involving mortal men; the first recognizable ''complex'' grammatical constructions, including an auxiliary verb and an indirect object; the first text identifiable as to language within the Mayan family, in this case Yucatecan; the first evidence for the existence of head-variant numerals, the next examples being from the second half of the Early Classic;[23] the first use of semantic determinatives; the first portrayals of the Lowland Maya Sun, Corn, and (perhaps) Rain Gods in forms clearly recognizable when compared with later depictions; and the earliest known forms of a number of signs, some of which later show stylistic differences or several variant forms.

Of more consequence than the documentation of elements that Preclassic writing shared with its descendants is the evidence for significant differences. Later Mayan writing does not record certain types of inflectional affixes, such as aspect prefixes, but it does spell out such inflectional morphemes as verbal-aspect suffixes and pronominal prefixes of nouns and verbs. Signs representing derivational affixes are also used, such as T23 to derive nouns from verbs, T88 for various -V*n* suffixes, T126 for reflexes of pM **-e·x* and **-e·r* and for such roughly homophonous forms as the incompletive **-i(h)*, and various signs for pM -V*l* suffixes. We do not find this situation in early stages of Mayan writing, as far as we can determine from the text of the Pomona flare. Inflectional morphology is completely absent: neither pronominal prefixes nor aspect suffixes are represented, although uniformity in the grammars of Mayan languages makes it certain that they were present in Unit 5 in the sentence represented by Units 3-7. One derivational suffix is present, however—the T88 of Unit 4—and nothing indicates the omission of any required derivational affix. While some Late Preclassic texts do indicate at least the pronominal prefixes (e.g., the inscription on a Chichen Itza tubular jade bead), it appears that inflectional affixes were not represented as fully as derivational affixes in Lowland Mayan hieroglyphic writing of some eras, regions, or speech communities in the Late Preclassic.

---

[23] The Tuxtla Statuette, which bears a date roughly contemporaneous with the deposition of the Pomona flare, may also have an example of the Sun God as the deity of the number 4 (see Justeson 1986:fig. 2c).

This stage of writing may also be represented, in modified form, in a substantial corpus of Maya hieroglyphic literature. The Primary Standard Sequence of Maya pottery is plausibly identified as a funerary text by M. D. Coe (1973). Very likely an ancient and traditional text, it is noteworthy for the virtual absence of grammatical affixes; in particular, the pronoun signs —extremely frequent in all other types of text— are hardly ever found. It does habitually use the derivational suffix T88 after the T1014 (''God N'') verb. This traditional text may have preserved an archaic stage of Mayan writing, of which the Pomona flare provides the only contemporaneous witness. The Egyptian Pyramid Texts, including the Book of the Dead, preserved archaic linguistic constructions and modes of written expression that had been obsolete for a millennium; the parallel Maya maintenance of a traditional text with a dearth of inflectional morphology but definite indications of at least some derivational morphology supports the conclusions we have drawn from our analysis of the script of the Late Preclassic text of the Pomona flare. Justeson's (1981) analysis of the Glyph F compound also points to the maintenance of traditional spellings defective in their representation of inflectional morphology in the usual absence of the pronominal prefix *u-* (but not of the completive aspect suffix *-i(h)*). Finally, the ''skybands'' or ''astronomical bands'' used in scenes to represent locations may also have been retained from ancient written traditions, perhaps going back to the Olmec. These bands consist of series of rectangular cells, each usually composed of a single sign representing a root morpheme; the exceptions are pairs of signs, both representing root morphemes.

This evidence bears on the early evolution of writing systems. Early inchoate scripts developing without the stimulus of a prior phonetic script begin by representing referential but not strictly grammatical forms—thus, as logographic systems representing roots or words, but not grammatical particles or affixes. Because many derivational affixes produce stems that contrast referentially with their roots, while inflectional affixes have primarily syntactic functions, derivational affixes are predictably the first to be adopted in an inchoate script. A preference for derivational over inflectional morphology is also an important grammatical characteristic of pidgin languages, which, like incipient scripts, have small vocabularies and few overt grammatical markers relative to the spoken languages to which they relate. Although the adaptations are distinct, they make use of many of the same strategies for expressing language (see Justeson 1977:78–80), again suggesting that derivational morphology should be better represented in developing scripts than is inflectional morphology. The text of the Pomona flare, therefore, appears to represent a stage of writing that can be predicted on theoretical grounds, but which has been difficult to verify because of the paucity of data on such early stages of writing in the Old World; only Protoliterate Sumerian texts offer much of a corpus. Accordingly, the text of the Pomona flare is a precious addition to our tiny store of knowledge pertaining to the general evolution of writing systems.

ACKNOWLEDGMENTS

We thank Mrs. Barbara Conklin of the American Museum of Natural History for access to the Pomona pottery, and Miss Muriel Kirkpatrick of Temple University and Gordon Willey for the loan of comparative sherd material from Barton Ramie. Justeson thanks Dumbarton Oaks for postdoctoral fellowship support (1981–1982) of part of this research and of his participation in the writing of the initial draft of this paper. He also thanks the National Science Foundation for its support of research into the early evolution of Mayan writing (Grant BNS-8421247), results of which aided revision in some particulars.

Concerning the archaeological context of the flare, we benefited from discussions with Gordon Ekholm and from unpublished correspondence of Alfred V. Kidder provided by his grandson, Tristram Kidder. A previous version of the syntactic analysis was presented at the 6th Taller Maya, at San Cristóbal de las Casas, in July 1982. We thank participants in the Taller for discussion of linguistic claims and for questions posed during that presentation, and Victoria Bricker, William Hanks, and Pierre Ventur for subsequent discussions of linguistic issues. We thank Barbara MacLeod for comments on our readings of the grammatical affix signs in the text, Peter Mathews for providing epigraphic parallels for some of the other signs and compounds in the inscription, and Terrence Kaufman for critical comments on an earlier version of the text.

The manuscript was completed in April 1983; revisions of details, including updating or replacement of bibliographic entries, were made in August 1984 and June 1986, but literature to which we did not have access in 1982 is seldom reflected. The epigraphic analysis presented in this paper is that of Justeson and Norman; Hammond has now presented an alternative interpretation for the meaning of the text (see Hammond 1987).

4

NICHOLAS M. HELLMUTH

Early Maya Iconography on an Incised Cylindrical Tripod

A fifth-century Guatemalan artist incised on a clay funerary vessel a remarkable vision of lords of this world and monsters of the next world (fig. 4.1). The actors in this combined historical-mythical interaction show how the Early Classic Maya borrowed from their Preclassic predecessors in Izapa, and how the Early Classic synthesis of Izapan, Abaj Takalik, and Kaminaljuyu concepts (see Parsons, this volume) was the basis for subsequent Late Classic and Postclassic symbolism. This blackware pot uses visual-linguistic puns to reveal the enigmatic iconography and cosmology of the fifth-century Maya (fig. 4.2).

History and Dating of the Vessel

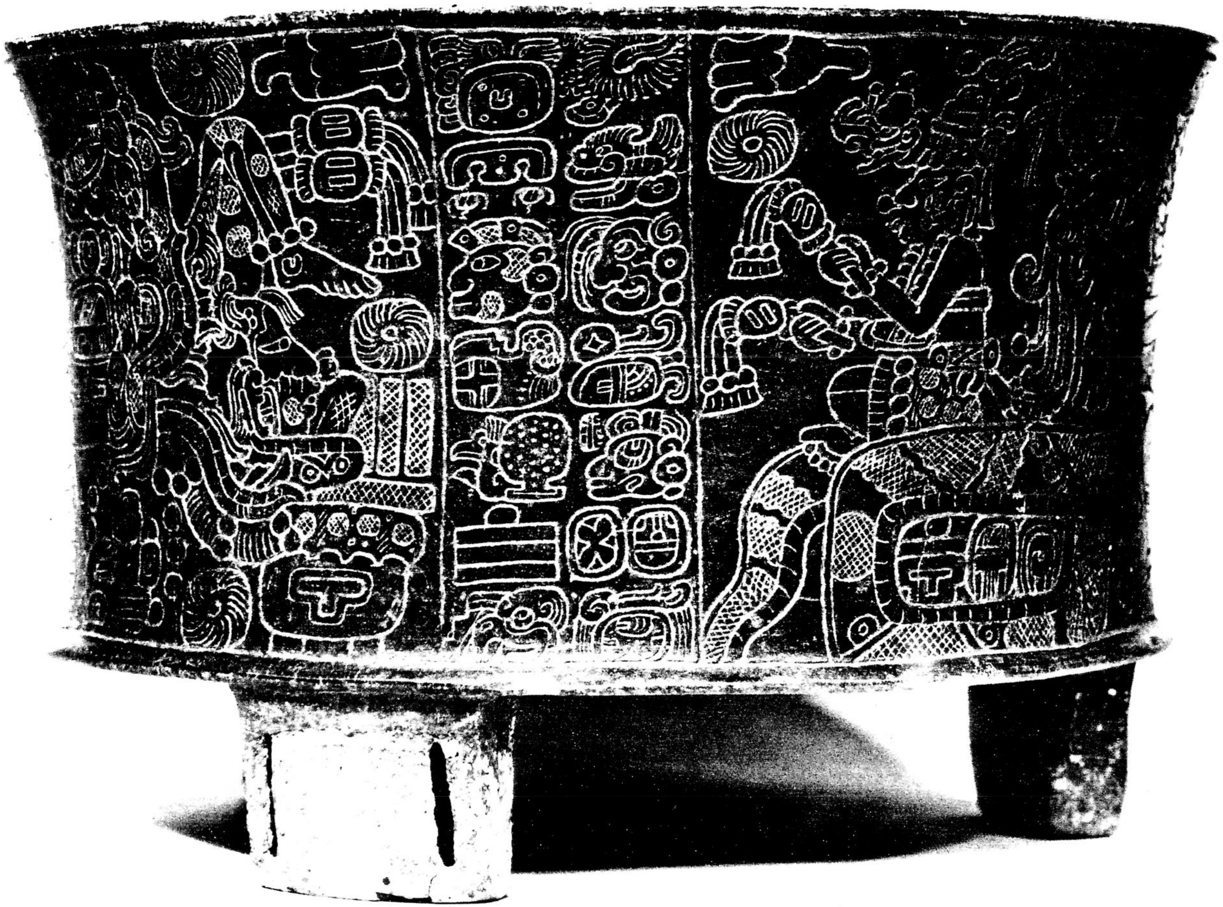
In 1976, the Deletaille, or Belgian, tripod[1] was exhibited in the "Meso-Amerikaanse Kunst" show held at the Generale Bankmaatschappij, Brussels (Dorsinfang-Smets 1976). Two years later Christine Deletaille wrote a thesis (unpublished) on the iconography of this tripod. I have earlier published one view (Hellmuth 1978:141).[2] In 1985 Lin Crocker presented additional illustrations of the vessel. A photograph and roll-out drawing of the vessel were published in *Rediscovered Masterpieces of Mesoamerica* (1985:figs. 328–329). Its aesthetic merits are self-evident; this paper is dedicated to its iconography.

The large, black cylindrical tripod is 20.5cm high and 30.5cm wide at the rim. It is in original, untouched condition, with no modern incising and no restoration whatsoever. I have studied the vessel itself on three occasions and date it on the basis of ware, technique of incising, iconography, and contents of the hieroglyphic text. It has

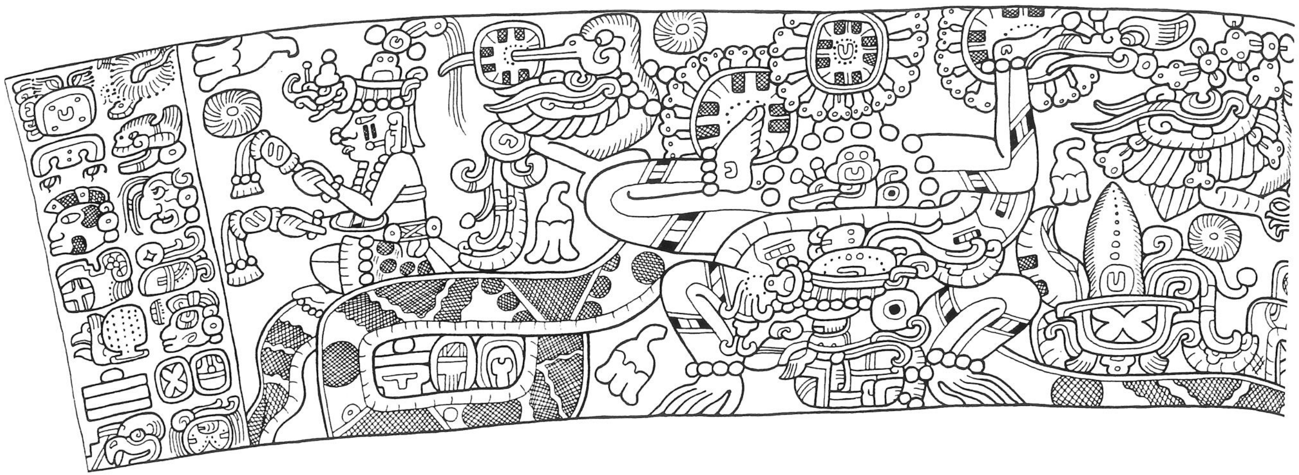
---

[1] The vessel, in the Deletaille collection, Brussels, is referred to in this paper as the Deletaille tripod, the Belgian tripod, or the tripod.

[2] The present paper was begun in 1981, while I was a Visiting Fellow in the Department of History of Art at Yale University, as part of my long-range project to catalogue Maya art.



4.1 The Deletaille tripod. (Photograph by the author.)



4.2 The Deletaille tripod. (Roll-out drawing by Lin Crocker.)

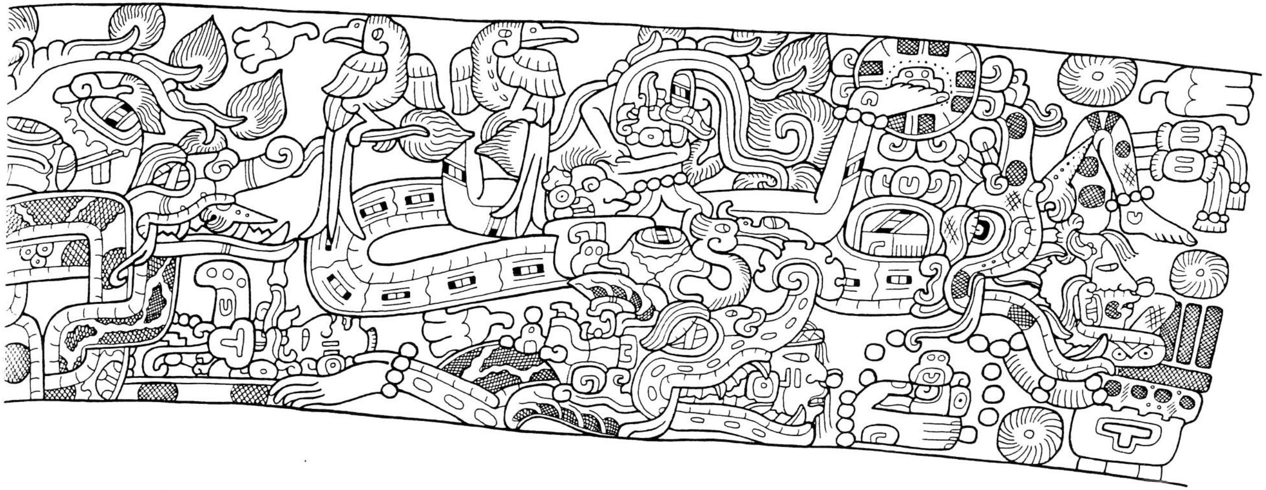
been further dated as definitely Pre-Columbian by a thermoluminescence examination at Cambridge University, as well as by epigraphic analysis by Linda Schele.

The tripod is unquestionably Early Classic, but the phase is debated. In accordance with the ceramic sequences worked out for Holmul, Uaxactun, and Tikal, any sophisticated decorated tripod is automatically dated as Tzakol 3. Linda Schele, however, believes that the visual ambiguity featured by the artist speaks for an early date, Tzakol 1, before the myths had been standardized (personal communication, 1981). Independently, Michael Coe has proposed a Tzakol 1 date for an incised God N vessel of comparable blackware in the Pearlman Collection (M. D. Coe 1982a:no. 33) and for the Pearlman conch (ibid.:no. 63). The God N bowl and the cylindrical tripod are, in fact, fashioned from the same ware.[3] The question remains whether sophisticated, incised, thin blackware was produced as early as Tzakol 1 times.

It is an insurmountable archaeological fact that no slab-footed, Peten cylindrical tripods have been found in Tzakol 1 contexts, not even by grave robbers. The earliest cylindrical tripods of this type are Tzakol 2, and most are Tzakol 3. The shape and decoration of the slab feet alone can date this tripod. Furthermore, the style and content of both its hieroglyphs and its figures are closer to Tikal Stelae 1, 2, and 31 (late Tzakol

---

[3] Hellmuth (1985) establishes that the Pearlman bowl is from one of the same ateliers that produced Tzakol 2 and 4 cylindrical tripods.



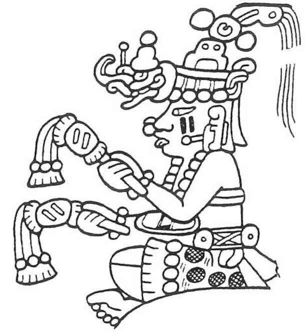
2 into Tzakol 3) than to the Leiden Plaque (8.14.3.1.12, A.D. 320) or Tikal Stela 29, both of which are Tzakol 1. The best dating evidence is the similarity in style and content of the monsters on the Deletaille tripod to those of the Río Azul Tomb 1 murals. The occupant of this royal tomb was born on 8.19.1.9.13, well into the Tzakol 2 period. If we presume that he lived to adulthood, he would have died late in Tzakol 2, possibly in the Manik IIIa phase (Tikal dating sequence), which is close to the beginning of Tzakol 3 (Uaxactun dating sequence). The early date proposed by Schele and Coe for the concepts is correct in the sense of archaism, but a Tzakol 1 production date is impossible. On the basis of unpublished finds in museums and private collections, I have concluded that figural art of Tzakol 1 pots was still rendered in an evolved Holmul 1 style, primarily in polychrome. A mature Early Classic style appeared on pottery later than on stelae. Not until Tzakol 2 were the great pottery works of Early Classic funerary art of Tikal, Uaxactun, and Río Azul produced.

The style, content, and hieroglyphic text document the fact that this tripod came from the Central Maya Lowlands and not from the Highlands. A neutron-activation analysis of the clay could determine whether adjacent southern Campeche was a potential source; in the meantime, a Peten origin seems the most likely. Nothing like this vessel is yet known for Belize.

ICONOGRAPHY OF THE SCENE

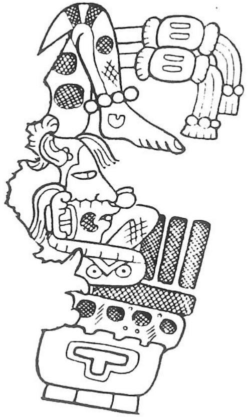
The Musician (fig. 4.3)

The leftmost personage in the scene is the only fully rendered and completely "human" character (fig. 4.3). The other "humans" are only heads or limbs that either are appended to mythical body parts—such as floppy, saurian hands—or have reptile-scale markings. The musician at the left is an idealized young, noble, Maya male, seated on a coil of a great serpent, which winds its way through this portion of the scene. Indicators of the young lord's status are the feline-spotted skirt, the "OXO" belt, and the forehead band; indicative of his situation is the *ahau*/cervical-bone headdress. He wears a set of double nose beads, the standard nasal jewel for the Early Classic. These double nose beads are found so often on Tzakol 2–3 faces that a portrait can be dated merely by their presence.


4.3 The Deletaille tripod, detail. The Musician.

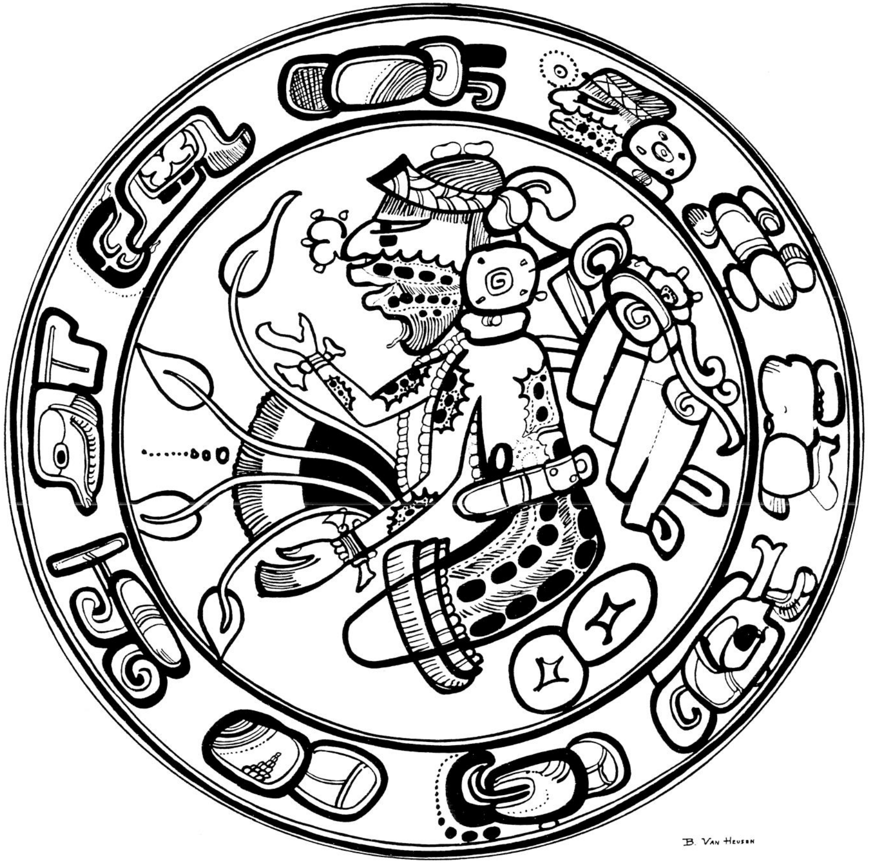
This figure holds a rattle in each hand. A second, identical pair of rattles appears behind the leg of a bodiless personage—the Dismembered Musician—carried in the jaws of a reptilian monster at the other end of the scene. The pairs of instruments here are identical; the artist seems to be using them to show the thematic continuity at the two ends of a long scene of corporal transmutation. Maya artists traditionally show the same person more than once on a vessel to present sequential episodes of a myth.

The Human Faces Held in Reptile Monsters' Jaws (fig. 4.4)

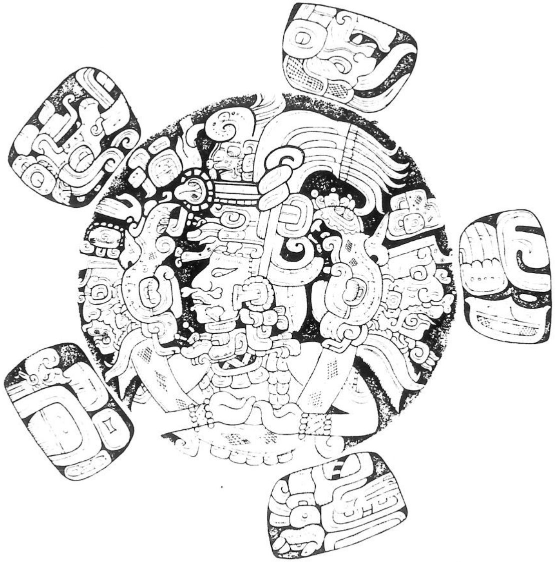

4.4 The Deletaille tripod, detail. The Dismembered Musician.

The Dismembered Musician is held in the open maw of a fearsome reptilian dragon (fig. 4.4). This musician consists of a face, one leg complete from thigh through foot, and a body segment in front of the mouth–probably an arm? An unidentified body part under the chin of the personage has the ventral-scale band and the "oVo" markings that are found on a serpent body elsewhere in the scene. The human face has a curving, crosshatched marking; similar circles dot the leg. There is a tick-tack-toe pattern on the arm and on the leg. Comparable markings on various segments of the monsters, especially on the upper jaw of the dragon, holding the musician, suggest that the man is metamorphosing into a part-reptile, part-human state. Evidence from a series of unpublished vessels indicates that the Maya believed in this transmutation as one stage in the journey to the nether world after death.

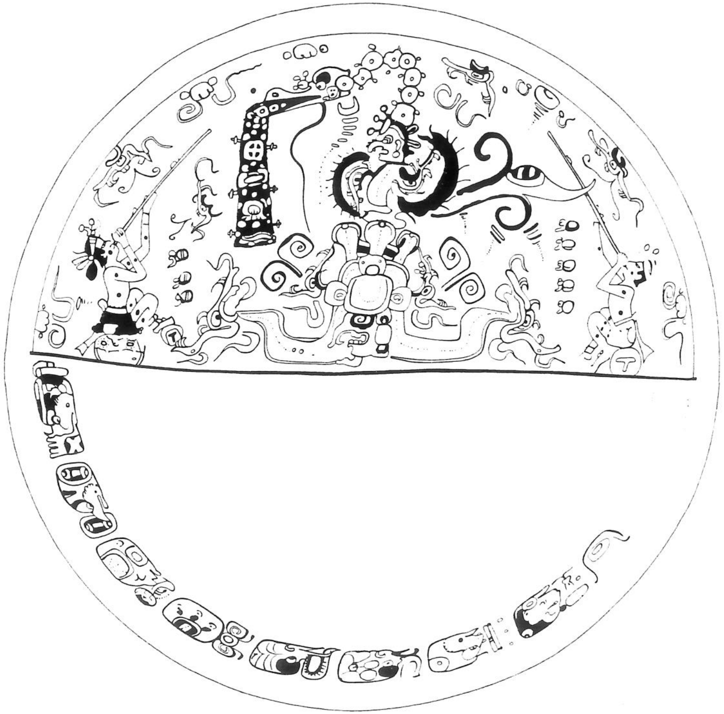
The man's face has a pelt patch suggestive of the personified form of the number 9, one of the two Headband Attendants on Late Classic vase paintings (fig. 4.5). An Early Classic cache lid shows a comparable scalloped mouth area on a personage inside the open maw of a ceremonial-bar dragon, but these characters have god eyes, a cruller, and other deity indicators (fig. 4.6). In front of the face on the Deletaille tripod, there is a throne with feline upholstery on top of an *ik* hieroglyph. A Late Classic plate published in 1950 by Frans Blom (it was discovered during bulldozing of a Maya site for



4.5 Peten region, Late Classic. Plate with full-figure, personified number 9. (Private collection. Drawing by B. Van Heusen.)



4.6 Early Classic cache-vessel lid. (Private collection. Drawing, F.L.A.A.R.)

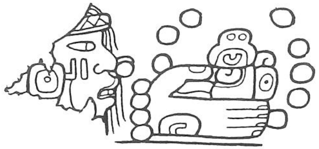


4.7 The Blom plate. (Redrawn by Lavia Gornto, F.L.A.A.R., after Blom 1950.)

the Chetumal airport) associates a feline-upholstery throne with one of the Headband Partners and an *ik* throne with the other (fig. 4.7). The Deletaille tripod artist conflates the two thrones and thus shows a possible personified number 9 nearby. The Blom plate shares other features with the Deletaille tripod, noted later in this paper.

IL-Face (fig. 4.8)

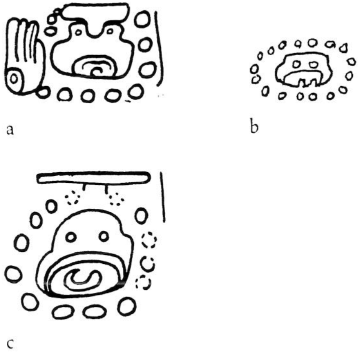
Below the musician in the dragon maw, another face, with a reverse IL painted or tattooed on the cheek, emerges from a crossed-bands-eye monster (fig. 4.8). IL-marked faces of young personages are common among glyphs of the first part of the Primary Standard Sequence. Personified numerals 1, 2, 3, and 8 also have IL tattoos (Thompson 1950:fig. 24). The Moon Goddess and other females have IL tattoos on their faces (but there are no female forehead circlets on the Deletaille tripod). Although



4.8 The Deletaille tripod, detail. IL-Face.

IL faces can be recognized elsewhere in hieroglyphs, we do not have usable information on their role in Maya mythology other than that the various tattooed heads are the reincarnated personages in this cosmological scene. The Deletaille IL-Face holds in his hand a stylized long-snouted god face with an *ahau* glyph surmounted by circlets. An identical motif appears behind the acrobat in the center of the scene (fig. 4.18). *Ahaus* surmounted by circlets are found in two cache-vessel inscriptions (fig. 4.9a,b) as well as in the Tikal Burial 48 murals (fig. 4.9c). These are further references for the Tzakol 3 date of the Deletaille tripod.

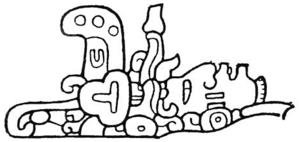
Both the number 9 and IL-Face rest in the toothy embrace of a mythical reptile. Comparable themes are standard throughout Maya art, from serpent ceremonial bars on early stelae to Late Classic polychrome vase scenes. Quirigua Zoomorphs B and P show a crossed-bands-eye monster with the bust of a revered lord staring out from the amphibious monster's maw. Are the characters in the jaws being eaten, reborn, or transported? When reptiles hold God N in their jaws on codex-style vases, the figure seems to reside comfortably in the jaws with no indication of pain, punishment, or consumption. The Deletaille faces are not God N, but they appear to reside well-installed within the jaws. Contemporary scenes, especially those on double-headed ceremonial bars, suggest that, in fact, the entire personage is present within the snake. Sometimes the full personage sits in the open jaws, in other instances only the face pokes out.



4.9 Beaded halos. a. Peten, Tzakol period. Cache vessel. (Private collection. Drawing by Susanna Reisinger.) b. Uaxactun, Tzakol period. Cache vessel. (After R. E. Smith 1955, vol. 2:fig. 7.) c. Tikal Burial 48 mural. (Drawing courtesy of the University of Pennsylvania Tikal Project.)

Bearded Lord with Inverted Ik *Headdress* (fig. 4.10)

On the bottom level, to the left of IL-Face, is a youthful, but bearded, face with two vertical bars, similar to the facial decoration of the full-figure, seated musician, but without crosshatching (fig. 4.10).[4] The bearded lord has no body, yet no blood, no weapon, no celts hanging from the neck, nothing else (that we yet recognize) indicates that an execution has taken place.[5] Death and the afterlife, though, are certainly the key to the iconography of the vessel.



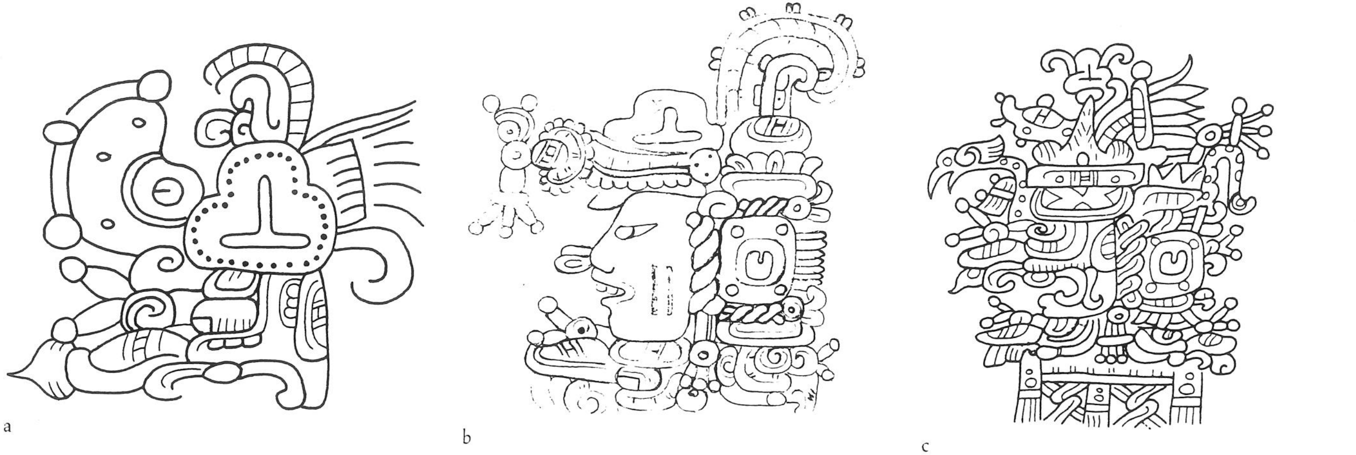
4.10 The Deletaille tripod, detail. Bearded Lord.

Atop this lord's forehead, a long-snouted-monster head wears a headdress featuring an inverted *ik*. The monster's nose ends with a bead. Virtually the same combination of elements is seen on a rectangular cache box (fig. 4.11a); on this unusual container a Sun God wears the headdress. On the Deletaille tripod, the head under the inverted-*ik* headdress is human but cannot yet be further identified. A simplified form of the headdress is found on a contemporaneous, orange, profile, incised cache vessel

---

[4] On stone sculptures and non-painted pottery, crosshatching stands for either the color black or serpent or fish scales.

[5] Elizabeth Benson suggests (personal communication, 1986) that what I had thought was a beard may perhaps be a cut-off neck, which would certainly fit in better with the iconography. She suggests that this neck should be compared with the ragged edges of the body of the Coyalxauhqui sculpture at the Templo Mayor.



4.11 Inverted *ik* headdresses. a. Tzakol period. Rectangular cache box. (Private collection. Drawing by Barbara van Heusen.) b. Peten, Tzakol period. Cache vessel. (Private collection. Hellmuth Photo Archive 471671-22. Drawing, F.L.A.A.R.) c. Peten, Tzakol period. Cache vessel. (Private collection. Hellmuth Photo Archive 413925-7-Neg.14. Drawing by Susanna Reisinger. Copyright F.L.A.A.R., 1982.)

(fig. 4.11b).[6] A Late Classic rendition of this headdress appears on the lady of the wooden lintel of Tikal Temple II. The *ik* headdress substitutes for the Quadripartite Badge headdress, sharing the seashell in the same position (fig. 4.11c). An elite personage on El Zapote Stela 5, dated 9.0.0.0.0 (Tzakol 2), wears the headdress with prominently projecting seashell but with no *ik* (fig. 4.12).

A standard feature of most of these headdresses is the element that sticks up from the top of the inverted-*ik* cartouche. This erect form shows the snout of the serpent. The same "recurved-snout" face[7] (not used as a headdress) is seen twice on Tikal Altar 19, which is believed to be the companion to Tikal Stela 31, an archaistic Tzakol 2 sculpture. This type of nose curl is similar to the glyph for the Maya month *Zip* as a variable element within the Introductory Glyph of a Long Count stela inscription (Thompson 1950:fig. 22). M. D. Coe (1973:nos. 9, 20, 25) christened similar creatures in Late Classic form and context the Zip Monster, a tag for certain monster faces that stick out in front of the foreheads of the Young Lords. Differentiating between Zip Monsters, certain forms of the Jester God, and reptile faces with no lower jaw can be a problem, especially in complicated Holmul Dancer scenes. I would include within a Zip Monster family most representations of what Proskouriakoff (1950:fig. 14s–u) called the "serpent fret," as well as forms of the skyband. A full-length study of all recurved-monster faces is required before the iconography and nomenclature can be worked out satisfactorily. The patronage of calendrical *Zip* is not yet established for these faces when in non-textual situations. Kubler's (1977) term "recurved-snout" serpent is the most accurate physical description. The term "serpent fret" is, fortunately, not being used in current iconographical literature and should be retired. Future academic research may conclude that not all recurved-snout serpents are Zip Monsters. For the present, I treat the Recurved-Snout Monster as the Early Classic form of the Zip Monster, and I use the phrase as a general term for Late Classic examples.

---

[6] All these orange cache containers are Tzakol 2 or 3. They are definitely not Tzakol 1, despite their similarity to Preclassic and Protoclassic architectural façade stucco masks. Tzakol 1 incensarios look very different (Hellmuth Photo Archive).

[7] Kubler's descriptive term for a similar head on a Dumbarton Oaks bowl (1977:6).

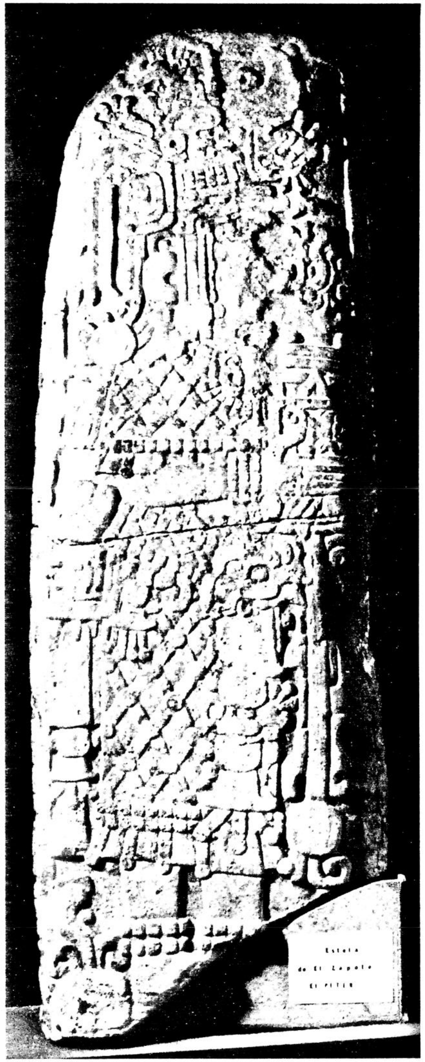
In the Late Classic period, Recurved-Snout Monsters are often decorated with a band of beading that looks like a bandolier. This beaded variant often forms the central element of headdresses for rulers who wear tubular beads in trellis pattern on their skirts. The noble on Caracol Stela 5 wears an erect recurved-snout headdress, as does the kneeling female on the Palenque Temple XIV sanctuary bas-relief (see Schele, this volume). Other examples may be found on an unpublished Site Q stone panel and on Edzna Stela E. A character of unidentified sex on Caracol Stela 5 (the face in the serpent ceremonial bar, left side) has an erect recurved feature, but the rest of the headdress is indistinct. Persons with trellis-decorated skirts on other Caracol stelae have pure Quadripartite Badge headdresses. Sometimes only the beaded nose of the monster is present—the rest of the Recurved-Snout Monster is not illustrated, as on the carved wooden lintel of Tikal Temple 2.

Bandoliered Recurved-Snout Monsters also occur at Palenque—on the Temple of the Cross, on Pier C, House D of the Palace, and on the Sarcophagus lid. In all these examples, the serpent snouts sprout from Quadripartite Badges. The flower on the Temple of the Cross is a late, formalized version of the isolated, floating buds on the Deletaille tripod. Symbols of blood, death, or skeletal vertebrae are associated with each other. Where worn as a Quadripartite Badge headdress at Palenque (Palace House D, Pier C; Kubler 1969:fig. 33c), the jeweled *zip* has a *kan* Cross with bone and "completion" symbols.[8] It would be interesting to know if the women wearing the bandoliered, erect recurved-snout headdresses were being commemorated after blood sacrifice or death, because the Recurved-Snout Monster is certainly associated with death symbolism at Palenque.

At present, the Deletaille rendition is the earliest known example of the inverted-*ik* headdress, unless El Zapote Stela 5 (9.0.0.0.0) is earlier. By the Late Classic, the *ik* is often replaced or eliminated, and the erect Recurved-Snout Monster is elaborated for wearers of skirts with tubular beads in trellis pattern.

The Reptile Heads (fig. 4.13)

Three fanged reptilian heads are closely associated with the serpent bodies that meander through the scene. Two heads have crossed-bands eyes; two have central per-

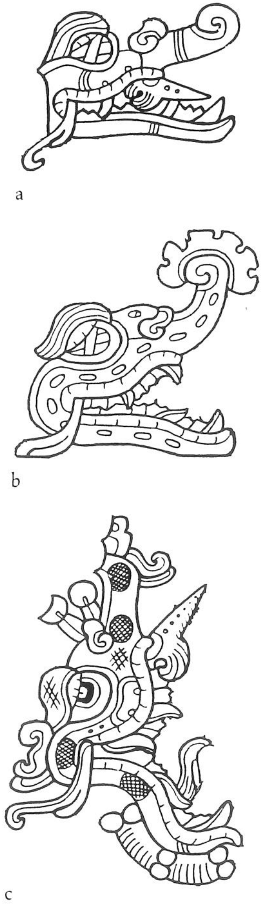


4.12 El Zapote Stela 5. Early Classic, 9.0.0.0.0. (Museo Nacional de Arqueología e Etnología, Guatemala. Photograph by the author.)

---

[8] David Stuart's (this volume) blood signs.

forator teeth; two have a double yoke under the eye; and all three have essentially the same dentition (aside from the frontal perforator, which one face lacks). These three faces are also virtually identical to a reptile face on the Río Azul Tomb 1 murals (I. Graham 1986) and to the headdress monster on the floating ancestral character above Stormy Sky on Tikal Stela 31. All five faces should be studied together and compared and contrasted to the related creatures at the end of the double-headed serpent ceremonial bars on Tikal Stelae 1 and 2, as well as on approximately contemporary cache lids/plates. Not all have cross-bands eyes, however, and various mythical species may be intended.


a
b
c

4.13 The Deletaille tripod, details. Reptile Heads.

Although on the Deletaille tripod the faces are associated with the bodies of snakes, this association does not make the visages snake faces. Linda Schele has reminded me that snakes have no eyelids, so we are dealing with a composite monster that may include crocodilian and iguana traits. The reptile face that holds IL-Face in its jaws has oval face markings (fig. 4.13b). Similar markings are found on the back of the naturalistic, full-bodied crocodilian of Copan Altar T (Maudslay 1889-1902, vol. 1:pl. 95). Fanglike teeth—but without venom fangs—make the dentition closer to that of a crocodilian than to that of a snake.[9] A scrolled, nonsymmetrical, bifurcated tongue is rendered on the three Deletaille dragons, on the Río Azul one (fig. 4.14), and on the Hauberg Stela (Stuart, this volume, fig. 5.48). Two of the Deletaille dragons, the Río Azul dragon, and most of the Tikal composite monsters (of various species) all have a giant shark's tooth as frontal perforator. Analysis of contemporary cache vessels and of sharks' jaws in natural history museums shows that the Maya intended these solitary front teeth to be sharks' teeth.

The following list gives a sample of the better-known examples of crossed-bands-eye monsters, of both the Early and Late Classic.

Copan, relief, Structure 11 (Kubler 1969:fig. 65).
Copan, Altar T, top, naturalistic crocodile.
Copan, Altar T, west side, anthropomorphic crocodile.
Copan, Stela N, south face, left side, bottom.
Jaina, incised shell (*Boletín* 1975:back cover).
November Collection, black background vase; Cauac Monster supraorbital plate (Robicsek 1975:fig. 153; Quirarte 1979a).
Palenque, Temple of the Cross, stucco on roof, north side.
Palenque, Temple of the Cross, stucco on roof, west side.
Quirigua, Zoomorph B, south.
Quirigua, Zoomorph P, north.
Río Azul, Tomb 1 murals (I. Graham 1986).

[9] Of the three common Central American species of "alligators," two are crocodiles; the third, a caiman, is the only one in the Alligatoridae family.

Tikal, Stela 31.
Yaxha, Stela 6, base panel (Hellmuth 1978:88); eye form unclear.
As a hieroglyph: T844, Tikal Stela 31 (six times) and a cylindrical tripod, private collection.

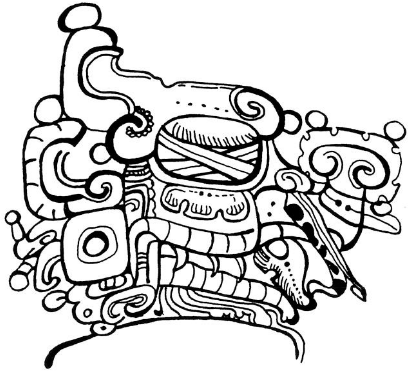
While the crossed-bands eye is an easy form of identification, this eye is not restricted to designating solely one mythical creature; Cauac monsters have them, too. Eyes are interchangeable among monsters and may denote rank, status, or other adjectival qualities, in addition to species. The crossed-bands-eye monsters of Río Azul and Tikal Stela 31 each have a "turtle-tail"[10] crested supraorbital plate, but that does not make them different monsters. The eyebrow merely adds a water relationship to the already-composite creature.

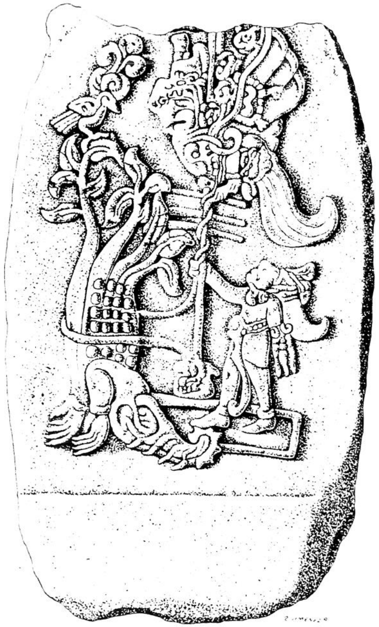
The snouts of the Río Azul reptile, the Tikal Stela 31 reptile, and the middle Deletaille reptile all have sprocket outline designs encircling the curl at the end. Sprocket-nosed crocodilians elsewhere tend to sprout into trees, as on Izapa Stela 25 (fig. 4.15). Dragon-headed trees are a pan-Mesoamerican feature (Séjourné 1970:fig. 35), often depicted in the Postclassic Maya codices. The following list gives examples of sprocketed snouts on reptilian monsters.

Copan, Stela N, south face; with crossed bands.
Codex-style plate, interior rim (Robicsek and Hales 1981:no. 116).
Codex-style vase, crocodile tree (Hellmuth Photo Archive).
Culhuacan(?), Postclassic, Central Mexico (Séjourné 1970:fig. 35).
Deletaille Tripod, twice as crocodile trees.
Hauberg Stela, on serpent's dragon head.
Izapa, Altar 60 (Norman 1976:fig. 5.14).
Izapa, Stela 25, crocodile tree.
Red Band Tepeu 1 bowl (Hellmuth Photo Archive A–381, A–392).
Tikal, Stela 31, no tree.
Yaxchilan, Structure 33, Hieroglyphic Stairway 2, on ballplayer.
Yaxha, Stela 6, base panel (Hellmuth 1978:88).

The Two Crocodile Trees (figs. 4.16 and 4.17)

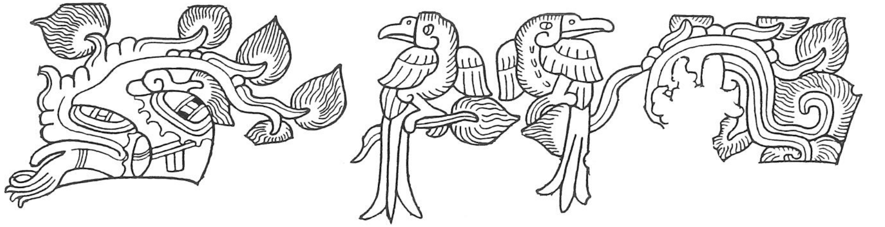
Backed up against the skeletal-necked bird is a mythical plant that has one floppy-fingered hand (fig. 4.16). This creation is a Crocodile Tree. Such floppy hands evolve from toads, iguanas, and especially crocodilians in Preclassic mythology. Elsewhere in


4.14 Río Azul. Dragon. (Drawing, F.L.A.A.R.)


4.15 Izapa Stela 25. (Redrawn by R. Jiménez after Norman 1973:pl. 43. Courtesy of the New World Archeological Foundation.)

---

[10] The eyebrows are so named after two Early Classic tetrapod turtle effigies whose tails are bifurcated and crested. This is a nonsense name, a memory device only. Comparable crested eyebrows are worn by some Early Classic GIs and Xoc Monsters.



4.16 (*left*) and 4.17 (*right*) The Deletaille tripod, detail. The Two Crocodile Trees.

the Deletaille scene, a related hand holds the disembodied human head (fig. 4.10). An early Peten jade (Townsend 1984:no. 57) and Yaxha Stela 6 document the fact that Izapa (essentially a non-Maya culture) was, in fact, a contributor to early Peten Maya mythology, as were Proto-Maya Abaj Takalik and Kaminaljuyu. Izapa Stelae 2 and 25 are definite prototypes for the tree monsters.[11] The Izapa Stela 25 dragon tree even has birds.

The artist of the pot intended two separate trees, one for each crossed-bands-eye monster. The left-hand tree (fig. 4.16) is complete; the trunk and leaves of the right-hand tree (fig. 4.17) are so covered by the God K and the turtle-bird (fig. 4.2) that it is difficult to work out its form and its connection to the other crossed-bands-eye monster. The arrangement of small deities climbing or grasping poles, snakes, or plants is seen on the Hauberg Stela, on the sides of Tikal Stelae 1 and 2, and on several Copan stelae. Other examples could be cited, for this setting was an ancient one in Maya tradition. On the Deletaille pot, extra limbs additionally confuse the image; these are legs, which serve for a disembodied, partially hidden acrobat (described in the next section). At the bottom of the tree, the appropriate crossed-bands-eye reptile face is seen, complete with a sprocketed nose (fig. 4.13b). To help solve the ambiguity, the two crocodilian trees are visually and conceptually united by the perching birds and identical leaves.

The complete Crocodile Tree clearly has a humanoid limb with elongated saurian fingers. The limb has an empty ventral band and a set of three perpendicular, closely spaced lines, a pattern that appears three times on the jaws of the crocodile head of the same tree. The artist is using jaw markings to associate limbs with heads.

Near the partially covered (right-hand) tree, several disembodied limbs poke out at various places. There is one clearly distinguishable leg with human foot on the top right. A digitless limb disappears behind a leaf between the twin birds, and, at the bottom left, there is a floppy-toed limb, which holds the inverted-*ik*-headdress lord. This limb belongs to the covered Crocodile Tree but is, at the same time, ambiguously available as one of the arms of the incomplete acrobat.

---

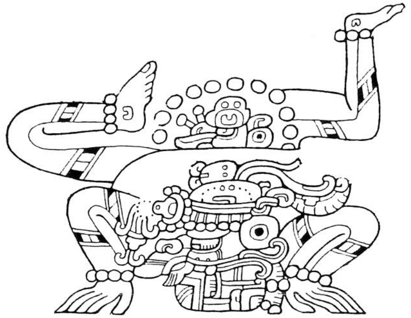
[11] The tree occurs in several versions, with a crocodilian head and with the head of a long-snouted monster. A tree with a Loincloth-apron Face on the trunk is something different.

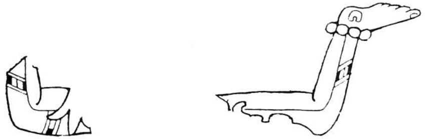
The Acrobats (figs. 4.18 and 4.19)

Two sets of humanoid legs push up in space in two widely spaced parts of the scene. Their pose may possibly classify the personages as forerunners of descending gods. These two acrobats are characterized by their upside-down position; long, floppy fingers; totally human feet; *nen* markings, denoting reflective shininess; and ventral divisions on their limbs. The left-hand personage is complete, with four limbs and a monster head (fig. 4.18); the right-hand one has no visible torso or arms (fig. 4.19) and is blended in with the covered Crocodile Tree and obscured by the serpent coils and the stack of mythical creatures —an upside-down feline head, a turtle-bodied bird, a character with uncombed hair, and God K. Lacking space to show everything, the artist uses visual tricks to add extra characters without having to show their entire bodies. The situation of the two acrobats is parallel to that of the Musicians and the Crocodile Trees: there are two of each, one to the left of the scene, one to the right; one is shown in full, the other lacks limbs and torso. These dual images may reflect natural life as opposed to supernatural reptilian afterlife. The two acrobats are definite reptilian conflations.

Both acrobats are entangled with *nen*-marked snakes. The acrobats themselves take on these *nen* markings on half of their limbs, which are divided so that reptilian scales can be accommodated on the other half. By making the snakes disappear precisely where the serpentine acrobats appear, the artist suggests that the acrobats take the place of the snakes for at least a moment.

Each acrobat's limbs also partially mimic the botanical-humanoid limbs of the two Crocodile Trees. The complete Crocodile Tree has *nen* markings (in turtle-carapace format); double-limb outline (ventral border); and long, floppy fingers. Are we witnessing the stages of transformation among human, vegetable, and animal?


4.18 The Deletaille tripod, detail. Acrobat, on the left.


4.19 The Deletaille tripod, detail. Acrobat, on the right.

The Serpent Bodies

None of the Deletaille snakes has a clearly defined tail or any other indication that it ends within the confines of the scene. The artist intended to show perpetual continuity of the serpents throughout the nether world. "Endless" snakes are used as dividers, frames, supports, ropes, and connectors in Late Classic Maya art,[12] on complex

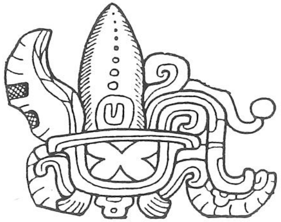
---

[12] See the black-background November Collection vase, Hellmuth photos in Robicsek (1975:fig. 153) and Quirarte (1979a:fig. 1), and other unpublished vases, Hellmuth Photo Archive. Linda Schele (personal communication) points out the deliberate ambiguity in the Mayan word for

Late Classic polychrome vases, and on Copan Stela D; a prototype is found on the early Hauberg Stela.

Since Maya serpents can have a head at either end, and sacred trees, such as that at Palenque, can have four heads (Quirarte 1981)—of which the front and two side ones will be visible—the number of heads in a given scene may not be one to a body. The fact that there are three reptile heads here does not necessarily mean that there are three snake bodies. Only the rightmost dragon head is clearly attached to a particular serpent body; the other two heads are only close to serpent body sections. The crossed-bands-eye monster holding IL-Face has a floppy-fingered arm with three ovals, the markings found on its jaws. On Copan Altar T and Quirigua Zoomorph P, north, oval markings signify the bumps of crocodilian hide. Such markings on the incomplete beast on the tripod emphasize the crocodilian nature and strengthen the visual bond between the disembodied arm and the detached dragon head. The artist also designed the scale patterns on the snakes so that, with the exception of the *nen* snake, the body segments form an indeterminate number of potentially different individual creatures.

Since there are no other heads in the scene that could serve as heads for the multitude of snake bodies, and because serpent ceremonial bars and other mythical Maya snakes have crocodilian heads, I believe that all three heads are intended to be the heads for the serpent bodies. The artist has cleverly situated the two crossed-bands Crocodile Tree heads next to "ends" of serpent bodies, so that, visually, both heads can simultaneously be associated with either body.



4.20 The Deletaille tripod, detail. Quadripartite Badge.

The Quadripartite Badge (fig. 4.20)

Late Classic Quadripartite Badges consist of a central *kin* underneath crossed bands, a centered erect perforator, and a stylized seashell. A mask in the Wray collection (Wray 1984:no. 19) shows that the Early Classic Peten badge form differs from the Late Classic assemblage typified at Palenque. Neither a shell nor crossed bands are present on the Deletaille-tripod badge, but the artist makes it clear that he intends a Quadripartite Badge by showing a prominent *kin* sign in a flowerpot-shaped frame with an erect perforator centered above (fig. 4.20). Tikal Stela 2 and two-dozen orange, Tzakol cache vessels show that the Early Classic badges do not have to include the crossed bands or, alternatively, the shell, since the Tzakol badge may be conflated with avian features (Hellmuth 1982). The scroll forms to the viewer's right of the Deletaille badge are identical with the tail of the beaked bird that pierces the hieroglyph to the left.

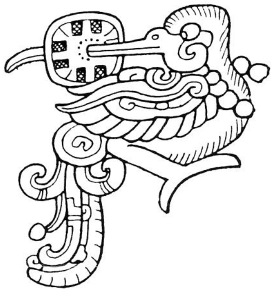
This early form of the badge is not worn as a headdress; it is nestled along a length of the serpent body. Freidel and Schele (this volume) have shrewdly ascertained that,

---

'snake' and 'sky' (*kan* and *ka'an*). I add that *kan* also means 'story' and 'four(ness)'; *ka'an* also means 'paradise'; and *k'an* means 'yellow,' 'precious,' and 'rope.'

in the Late Classic, the badge and its head are not the rear face of a double-faced monster but an adornment attached to a definite tail. The monster does not—in most cases, structurally could not—crawl in two directions (although exceptions and ambiguous specimens can be found). Even in early times, the Quadripartite Badge is placed on the "butt" of a monster.[13] A Late Classic codex-style plate shows the badge attached to the tail of a Venus Monster (Hellmuth 1986). This Venus Monster disappears over the edge of the plate in a manner analogous to the way the Deletaille snakes weave in and out of view.

Bird Piercing a Hieroglyph (Fig. 4.21)

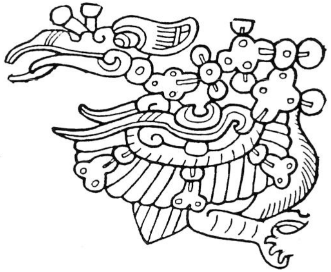


4.21 The Deletaille tripod, detail. Bird with glyph.

The bird on the left of the scene, behind the Musician, has a long beak that pierces a hieroglyph (fig. 4.21), T646—the same glyph that is encircled with bones elsewhere in the scene. A vase I excavated twenty years ago at Tikal has the same design (W. R. Coe 1967:52). The Tikal vase is simply a Late Classic rendition of a stock mythical character. The ancient Maya copied such standardized designs. On several other vases, a long beak pierces a glyphlike form (Hellmuth Photo Archive 471671-24, Duke University Art Museum; 453027-27, A-405, American Museum of Natural History; and others). Some of the birds have serpent-face wings. On other Red Band Tepeu 1 vases, the creatures are costumed bird-men, as on the Tikal vase. On the Red Band vases, the form being pierced is not always specifically a hieroglyph, although the general idea of piercing near the end of a long, thin beak is certainly directly comparable.

Both the long-beaked bird and a skeletal bird in the scene (fig. 4.22) have a serpent-face wing. It is normal for a composite Maya bird to have the beak of one species, the head of another, the foot of a third—and a serpent-face wing. The bone ridge of this wing combines a reptile upper snout with infixed eye and the supraorbital plate of a mythical Maya serpent. As is typical with some long-snouted creatures, this monster has no lower jaw. Serpent-face wings are allowable on virtually every species of bird created by the Maya, so we should be careful about naming a Principal Bird Deity merely on the basis of the wing. None of the birds on this tripod is the Principal Bird Deity.

The Skeletal Bird (fig. 4.22)

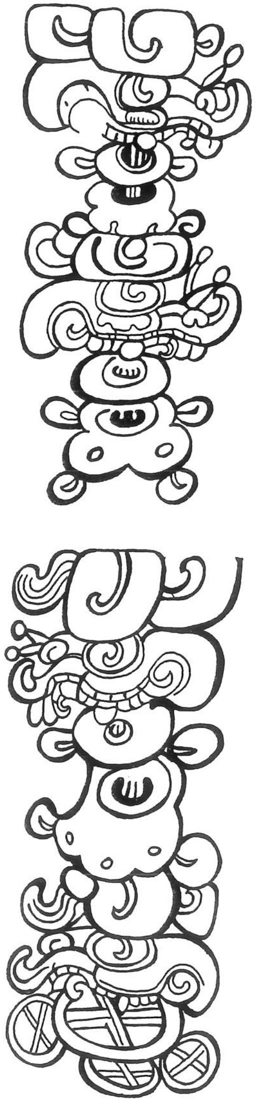


4.22 The Deletaille tripod, detail. Skeletal bird.

Perched on the complete Crocodile Tree is a water bird with a long, skeletal neck that comes out of the right side of its body; turns sharply and goes left, somewhat diagonally downward; and rises at the head, which looks out over the shoulder (fig.

---

[13] See Townsend (1984:no. 56). Based on unpublished data, these Chicago incised earrings are in Peten style and are Early Classic in date or, at the earliest, Protoclassic. They are Izapa-derived in concept but do not come from Izapa itself. Río Azul is a likely origin, from the point of view of style.



4.23 Río Azul tomb panels. (Drawing by Ewald Reitbauer, F.L.A.A.R.)

4.22). The neck consists of two alternating sets of bones: the vertebrae appear as a round central bone and two oval flanking bones; the larger bones are almost *ahau*-shaped. A virtually identical alternation of bone forms serves as a frame for the execution scene on Pier F, House D of the Palace at Palenque and on an incised Río Azul bone carving (Adams 1986:440). The necklace of the regal executioner has the same pattern, but without the little bone beads on the sides. The beak of the Deletaille skeletalized bird—as well as that of the turtle-bird—has the same shape as designs on Tikal Burial 48 murals, at A1, D2, and P3.

The Deletaille tripod skeletal-necked bird is similar to a bird on the Blom plate (fig. 4.7), which also pictures serpents, young lords, and isolated jewel-hieroglyph-death symbols (in the blood flow from the bird's beak). The feline-pelted *ik* throne at the far lower right of the Deletaille tripod is a conflation of the two thrones on the Blom plate. While the layout, style, and setting of the Blom plate and the Deletaille tripod are different, some of the actors in the Deletaille scene are also present on the later Blom plate, doing other activities.

To understand the Maya manner of skeletalization in art is to recognize the degree to which bones in general and cervix assemblages ("o-O-o" segments, three bones in a row, a cross section of vertebrae) in particular are dominant features in virtually all Early Classic costume and accessories. The headdress of the Musician has a cervix assemblage. The two identical flanking side panels of the Río Azul tomb (fig. 4.23) and a contemporary stuccoed-and-painted cylindrical tripod (Princeton University Art Museum) have bones as the standardized assemblage, pendant from the jaw of a long-snouted monster. Bone-rimmed glyphs T646 float over the whole Deletaille tripod scene. Cervix assemblages are found in the Tikal Burial 48 murals, on Palenque stone relief sculpture, and in floral form on the Palenque House E palace murals.

Isolated, Repeated Designs (fig. 4.24)

Three motifs are repeated independently in otherwise empty space throughout the Deletaille composition: whirls, giant glyph T646s, and buds (fig. 4.24). A fourth repeated motif, the halo of circlets around a long-snouted creature, may be situated in certain locations for specific, though unknown, reasons. The motifs indicate cosmological place (in the heavenly sphere) or transformational situation, such as death, reincarnation via reptilian metamorphosis after death, or other bizarre beliefs that we are only beginning to comprehend. The halo of beads or bubbles occurs three times: behind the complete acrobat, in the hand of IL-Face, and within a glyph T646 near the foot of the hidden acrobat. Beaded hieroglyphic halos also occur on a cache container, on the Tikal Burial 48 murals, and twice at Uaxactun (fig. 4.9).[14]

---

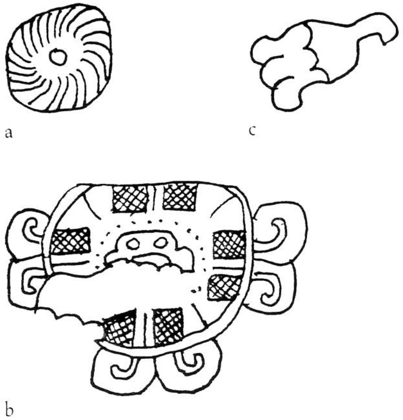
[14] These occurrences are all Tzakol 3, and thus provide further documentation of the most likely date for the Belgian tripod.

On the Deletaille tripod, a probable early form of glyph T646 occurs in several variations: pierced by the bird's beak; floating, surrounded by fleshless bones; and behind the foot of the acrobat and the disembodied acrobat (figs. 4.18, 4.19). Three have no central motif inside the halo of small dots; one has a U; one has an *ahau*. The far-right specimen has bifurcated scrolls at each quadrant. An almost-identical rendition (with bifurcated suprafix) is seen on the incised Pearlman conch shell (fig. 4.25a).

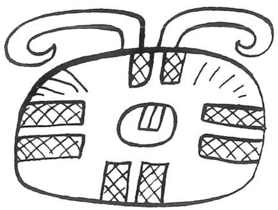
This glyph, in Late Classic form, is painted many times on House E in the Palace at Palenque (fig. 4.25b, c; Greene Robertson 1985:figs. 29–50). These Palenque mural examples even include the interior halo of dots. The same murals also have a flower or bud that is similar to the isolated, floating "buds" on the Deletaille tripod (fig. 4.24c). Codex-style scribes continued the use of T646 as a giant motif on small vessels (fig. 4.25d). Based on hints provided by the isolated glyphs on the Deletaille tripod and on two unpublished Tzakol 3 pots in the Hellmuth Photo Archive, I propose that the Tikal Tomb 48 mural glyphs, the Deletaille-tripod floating glyphs, glyphs on an unpublished polychrome cache plate, glyphs as wings of a stuccoed-and-painted shell-wing-dragon variant (Hellmuth 1986), the Palenque Palace mural glyphs, the Blom plate glyphs in the bird "vomit/bleeding," floating emblems on Palenque stone bas-reliefs, and codex-style low bowls featuring enlarged single glyphs are all variant versions of essentially the same funerary text. Epigraphers and iconographers can elaborate, differentiate, compare, and contrast the texts.

The glyph infixed on the forehead of the Sun God head in the Río Azul tomb mural (I. Graham 1986; Hellmuth 1986) would traditionally be cited as a *kin* without reservation, especially on formal grounds. A dozen well-known examples could be cited of this deity face with straightforward *kin* glyph, T544. The Río Azul glyph, however, has *kin* triangles only on top and bottom, with T646 double lines on both sides. The most telling example of such interchangeability is that on a Chama Quadripartite Badge (M. D. Coe 1978:no. 13), where the *kin* glyph is the main feature, but the expected triangular *kin* indications are not there; the glyph is T646. Other examples are found on the Kohunlich pyramid stucco masks. The triangular nicks and = appear to be in free association, which should not be entirely surprising, since many T544 *kins* have a four-petaled flower, the =-marked T646 is the "flower" pierced by the hummingbirds, and =-marked T646 is the "flower" on the Yaxchilan Lintel 2 ruler's cross-staff. A comparable crucifix-scepter flower is seen on a Late Classic Peten-region vase in a private collection (Taylor 1979:fig. 7) and on Yaxha Stela 31 (Ian Graham files). Linda Schele (personal communication) reads T646 as the flower *nicte*. By no means did T544 and T646 have exactly the same meaning, but they clearly can replace one another in certain Sun God situations.

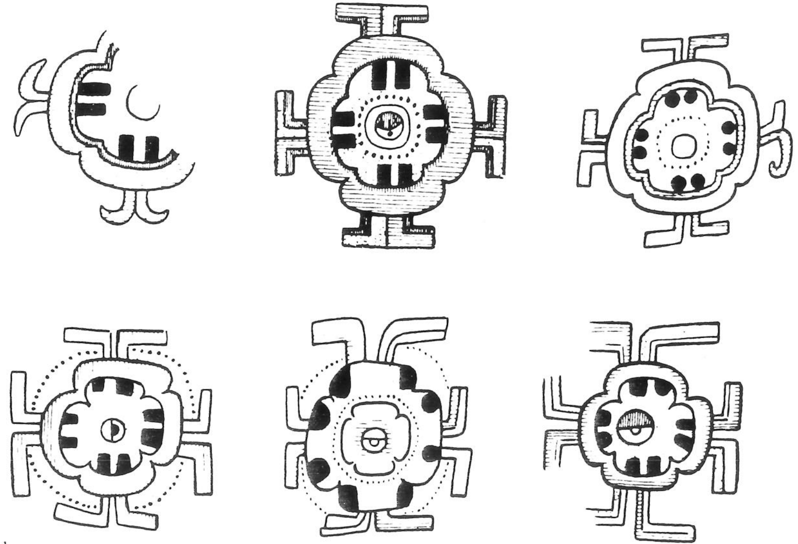
The whirl (fig. 4.24a) is possibly related to Thompson's pinwheel glyph, T627a, or to M. D. Coe's enema-ritual glyph (Coe and Furst 1977). On the Deletaille tripod, however, no enema clothing or symbolism whatsoever exists. No whirl appears in the Tikal Burial 48 murals, on the Red Band cache lid/plate (Hellmuth Photo Archive), on



4.24 The Deletaille tripod, details. Isolated, repeated designs. a. Whirl. b. Giant glyph T646s. c. Bud.

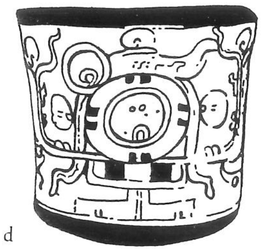


a

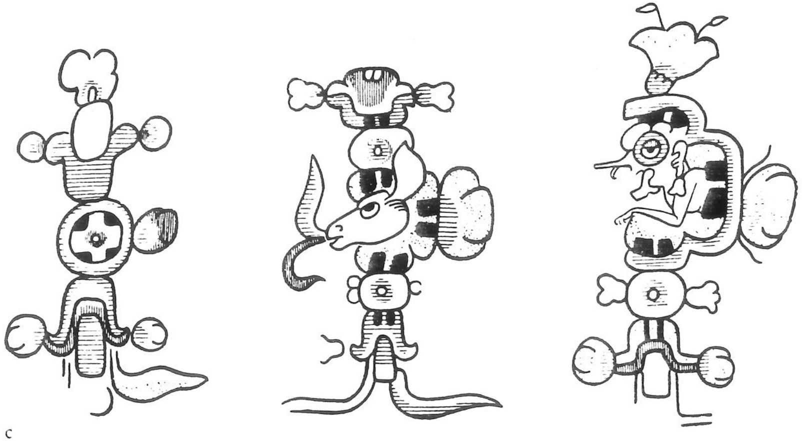


b

4.25 T646. a. Early Classic. Glyph from Pearlman conch. (Redrawn after M. D. Coe 1982a:no. 63, D3.) b. and c. Palenque, Late Classic. Palace, House E. Glyphs. (After Seler 1915:figs. 131, 132, 133, 137.) d. Peten, Late Classic. Cylinder vase. (Redrawn after Robicsek and Hales 1982:table 4C.)



d



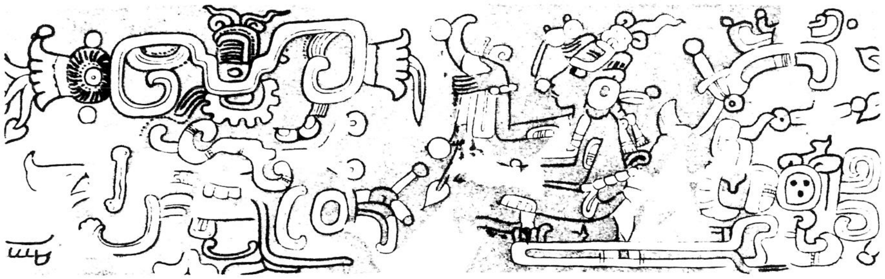
c

the Palenque Palace murals, or on codex-style pots. The whirl has not yet been found in flows that suggest blood, death, decomposition, skeletalization, or resurrection. At present, the only clue comes from the tripod's hieroglyphic text, where the glyph at B2 includes a radial whirl pattern with a wormy creature wiggling through. The creature could be a baby snake, maggot, leech, or larva that feeds on decomposing bodies. The glyphic whirl has punctate ends to the radii, however, and no cartouche, so it may not be related to the giant floating whirls after all. The whirl on the Deletaille tripod is probably related to that used as a flower part on a Kaminaljuyu cylindrical tripod (fig. 4.26).

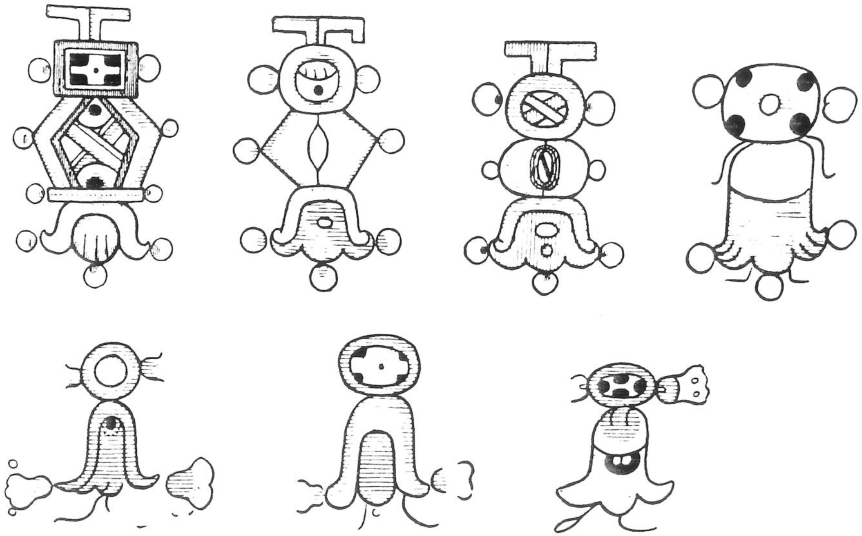
The House E murals at Palenque have a number of paintings that look similar to the floating buds of the Deletaille tripod (figs. 4.24c, 4.27). On an unpublished Peten, Early Classic, basal-flange bowl, a form with a comparable rounded end is definitely a plant, bud, or flower. The Palenque mural examples also might be buds or flowers, although there they have bones attached to them. Tikal produces a single example. On the Deletaille tripod, the forms could be buds with a bit of the stem.

SUMMARY AND CONCLUSIONS

This funerary-offering container shows a fifth-century A.D., Peten Maya conceptualization of life after death in the nether world. In this stage of reincarnation, Maya royalty metamorphose into composite amphibious-reptilian form and are conveyed in the maws of crocodilian-serpent dragons. This much of the vessel is "historical" in the sense that one or more of the humanoids in this scene may be either ancestors or the person himself, in whose royal tomb this offering was buried. Descent by generation to legitimize possession of office is documented. Late Classic Quirigua Zoomorphs B and P document the fact that crocodilian protectors of the dynastic ruler continued as a central feature in official state religion.



4.26 Kaminaljuyu. Cylindrical tripod. (After Kidder, Jennings, and Shook 1946:fig. 204b.)



4.27 Palenque, Late Classic. Bud designs. (After Seler 1915:figs. 129, 130.)

The remaining props and actors are entirely mythical. Standardized supernatural entities are presented, such as the Crocodile Tree, God K, Quadripartite Badge, turtle-bird, bird piercing hieroglyph, and various other birds. Some of these mythical characters derive from the Preclassic heritage of Izapa or Kaminaljuyu. As an Early Classic work of art, the Deletaille tripod shows an important midpoint in the evolution of funerary symbolism.

The isolated floating motifs are part of a funerary text that is more completely rendered on the contemporary murals of Tikal Burial 48, on an unpublished cache plate, and as glyphic wings of a variant of a shell-wing dragon (Hellmuth 1986). Aspects of the Blom plate, Palenque Palace murals, Palenque tablets, and certain codex-style paintings continue the use of these Early Classic Guatemalan funerary motifs. This funerary message speaks of death, skeletalization, and the afterlife, especially reincarnation. The hieroglyphs of this incantation may be written as a text (the cache plate) or as isolated symbols, which condense so much meaning that they may appear alone. The Palenque and codex-style manner of use shows that these glyphs do not need to be in sentence or textual form.

Skeletalization, metamorphosis, and amphibious transportation are the interrelated themes of this dynamic scene. The artist used visual and linguistic puns along with deliberate ambiguity and "incompleteness" to set the stage for the cosmological drama. The Deletaille vessel represents a dramatic portrayal of the specific roles of the snake in Maya beliefs, one role being to assist the eternally youthful lord. This snake is not attacking, biting, eating, swallowing, or vomiting the lord. Although the bust is in the snake's mouth, the snake is not even threatening his charge. The humans are serene and never look the worse for wear in the toothy embrace. They are being held, conveyed, or presented by the snake. This theme is dominant on serpent ceremonial bars of dynastic portraiture from the Preclassic onward throughout Maya history.

I present the hypothesis that the ancient Maya believed that human beings resided in reptiles during a period of corporal transformation. This reptile may be the mythical *Kan Hel* dragon (Alvarez 1980:337), which I translate as the Dragon of Transfiguration. After change of body, these snakes facilitated movement from one layer of the nether world to the other. The apparition of royal males at Yaxchilan emerging from giant snakes as the visions of females undergoing bloodletting rituals is simply another instance of the reptile as a vehicle of transportation of a possibly recently deceased human being.

The snake was simultaneously amphibious (*kan*, 'snake') and celestial (*ka'an*, 'heaven'). Mayan-Spanish dictionaries show that the linguistic puns go far deeper and are the key to understanding the cultural concepts expressed in the scene. *Wayasbil* is the Mayan word for 'metamorphose' ('transformar' in Spanish). *Ah Way* is the 'diviner' (sometimes working through dreams), who may take the form of animals. *Wayasba Kimil* is a figure of death (based, evidently, on dreams). Metamorphosis into a god was no problem in Maya belief; it is expressed by *walk'esahba ti' Dios*. *Walk'esah lakum* means to 'turn over,' putting the feet in the air and the head down on the ground—precisely the position of the two acrobats. The *nen* markings and ventral lines show visually the metamorphosis into a reptilian form. The Maya may have had theological problems in explaining how the rather obvious skeletalization of the dead could be re-fleshed for eternal life. Maya theology also had to consider the underwater aspects of much of their nether world. Amphibious creatures, such as frogs, crocodilians, and snakes, provided the natural models with which to solve certain problems of believability. Faith, hope, and hallucinatory drugs helped bridge remaining theological gaps of reality. But objective research must stay with extant scenes. On the Deletaille vase, we certainly have individuals in different states of being—compare the complete and dismembered musicians. With serpent-scale markings on his body, is the Dismembered Musician perhaps a lord being transmuted into a reptilian state?

Whatever the meaning of the scene, it remains the longest continuous portrayal of ancient Maya mythology yet found for the entire Early Classic sequence.

ACKNOWLEDGMENTS

Research for this paper was done in the Department of the History of Art, Yale University, 1980–1981, when I was a Visiting Fellow, supported in part by a fellowship from the Organization of American States. I thank Professor George Kubler for providing work space and a library at that time. I also thank Ambassador Federico Fahsen, Dr. Guillermo Mata, Dr. Michael Coe, and Dr. Gordon Willey for their letters of recommendation for the O.A.S. fellowship; L. Ronald Scheman for motivation; Dr. Michael Coe, Dr. Mary Miller, Dr. Linda Schele, and Lin Crocker for their exchange of ideas; Ian Graham, Peter Mathews, and Karl Herbert May for their hospitality and sharing of data; and Gillett Griffin and Elizabeth Benson for their patience with my writing. The photography and preparation expenses of this paper were taken care of by special, substantial donations by Ann and Harley Scott, Robert Schyberg, and a helpful lady in California. To Emile Deletaille I owe appreciation for hospitality while I was studying the tripod in Brussels. Spencer Throckmorton and John Ogle facilitated my comparative research during the four years between the Princeton symposium and the finishing of this paper.

5

Blood Symbolism in Maya Iconography

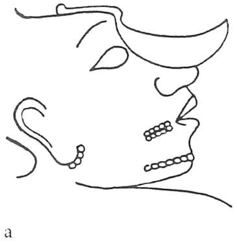
DAVID STUART

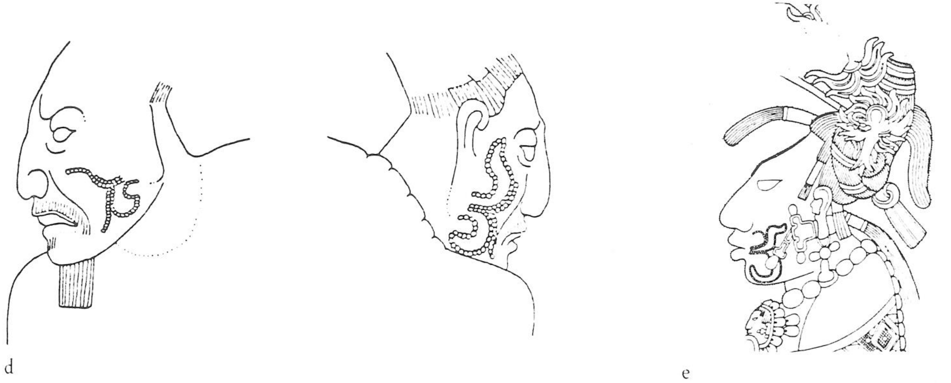
Ancient Maya monumental art, particularly that found in apparent "public" space, deals mainly with the lives of kings and the acts they performed or oversaw. The presence of historical subject matter in Maya writing was first revealed in detail in the key study of Proskouriakoff (1960), who used the inscriptions of Piedras Negras, Guatemala, to demonstrate her case. Later work by her (Proskouriakoff 1963, 1964), and work by David Kelley (1962), Berlin (1958), and others has confirmed this "historical hypothesis." The scenes that accompany such inscriptions also reflect the political theme and often depict the acts recorded in the glyphs. The act that is shown perhaps most often in Maya art and writing is auto-sacrifice by rulers.

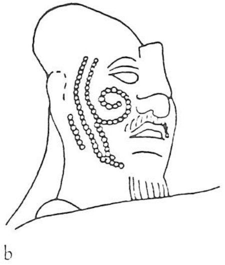
The Classic Period record of historical events and individuals was used to establish, clarify, and legitimize the role of the elite in ancient Maya society—a purpose that also lay behind most of the monumental art of Pre-Hispanic Mesoamerica. The purposes of this essay are to identify some major examples of the blood symbolism in Maya art and to help show the conceptual basis behind that image system. The essay builds on previous work on Maya bloodletting, in particular, the pioneering study by Joralemon (1974) and later work by Schele (1984a).

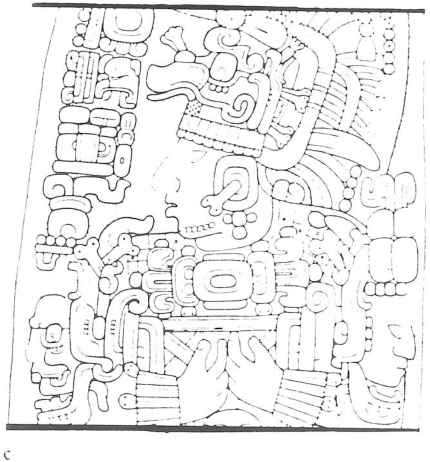
Blood Motifs and Texts

The identification of blood in Maya art is of fundamental importance. The presence of small dotted rows or scrolls on the face is a distinguishing feature of many portraits. These markings may be found on the nose, forehead, cheek, chin, or ear of a figure, but rarely, if ever, on any other part of the body. Figures of captives such as those on Piedras Negras Stela 12 and a ceramic figurine from Jaina, Campeche (figs. 5.1a, b), have these markings. The same dotted lines and scrolls are frequently seen on portraits of rulers or other persons of royal status. The principal individual shown on Stela 6 from Naranjo, Guatemala (fig. 5.1c), has on his chin a row of circles similar to those on the captives of Piedras Negras Stela 12. The dotted cheek scrolls of the main figure of the famous sculpture in the Sáenz Collection (fig. 5.1d; Easby and Scott 1970:no. 174) are







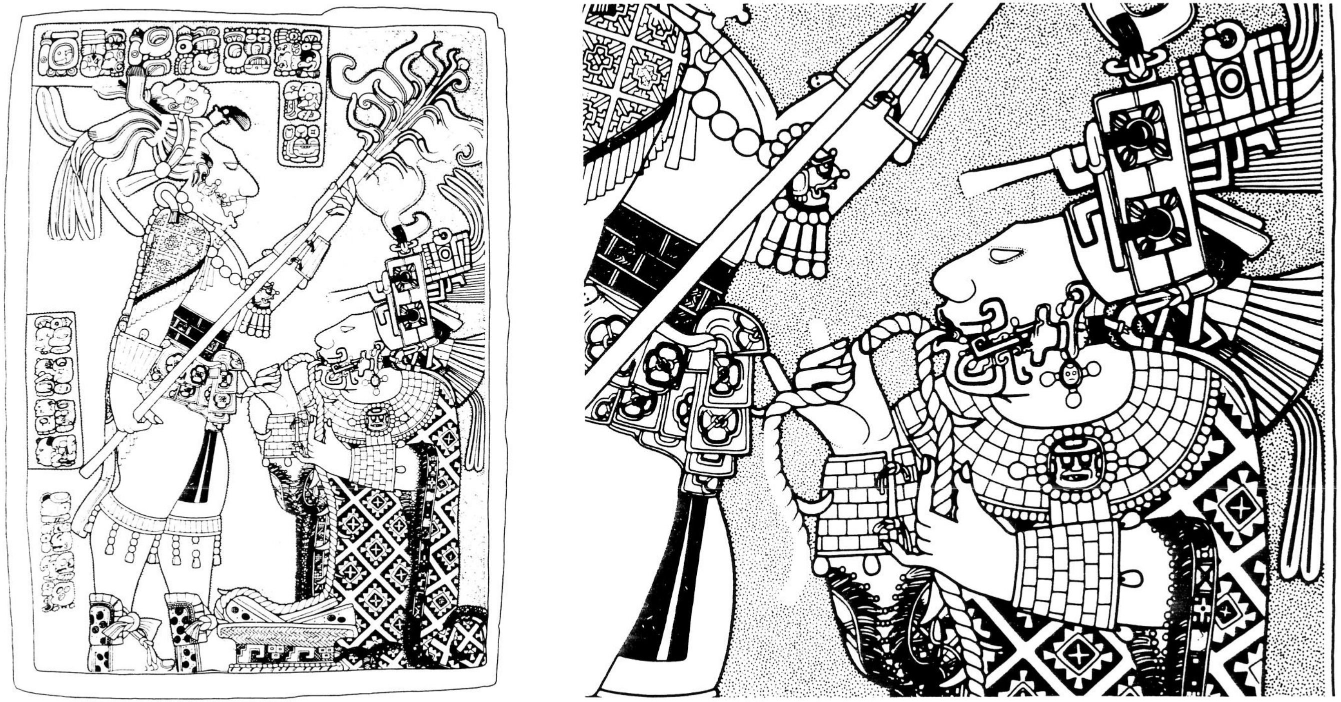


5.1 Dotted scrolls and lines in Maya art. a. Piedras Negras, detail of Stela 12. (Drawing by David Stuart.) b. Jaina, Campeche, head of figurine. (Drawing by David Stuart.) c. Naranjo Stela 6, detail. (Drawing by Ian Graham.) d. Sáenz Collection sculpture, detail. (Drawing by David Stuart after Easby and Scott 1970: no. 174.) e. Yaxchilan Lintel 26. (Drawing by Ian Graham.)

comparable to those on the Jaina captive. Yaxchilan Lintel 26 provides an example of such markings on a female figure of high nobility, portrayed with intricate dotted scrolls issuing from her mouth and covering much of her cheek (fig. 5.1e). There are many other instances of similar markings (Thompson 1946).

Thompson believed that such facial markings represented tattooing or ritual scarification. This interpretation is probably correct in some instances of elaborate patterns on the face and body, but the simpler examples of dotted rows and scrolls on the face, such as those on Yaxchilan Lintel 24 (fig. 5.2), appear to warrant an alternative interpretation.

Like many Maya inscriptions, the hieroglyphic texts that accompany the main scene on Lintel 24 can be categorized according to levels of importance or specificity to the action shown. There are three hieroglyphic "clauses" (the last of which, H1–H4, is, at this writing, little understood). The first clause is the main text of the lintel, beginning with a Calendar Round date (at A1, B1a) 5 Eb 15 Mac, or 9.13.17.15.12 in the Long Count. The verb that follows (B1b–E1a) signifies the action of bloodletting, or, more specifically, auto-sacrifice (Proskouriakoff 1973). The name and titles of the ruler "Shield-Jaguar" (Proskouriakoff 1963) come next and close this clause at F3. This initial text would seem simply to commemorate an act of auto-sacrifice by "Shield-Jaguar." The accompanying scene of Lintel 24, however, does not show "Shield-Jaguar" performing such an act. It is possible that he is shown afterwards. In any case, this text provides some general information, such as the date and the ruler's act, which puts the scene and the text describing it into a thematic context.



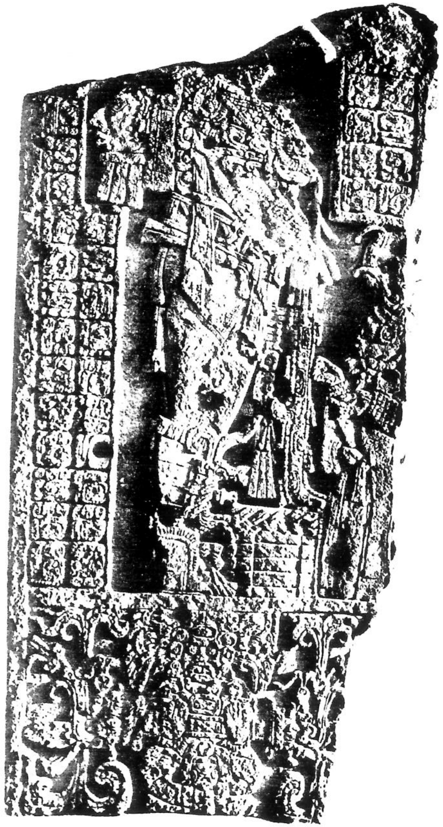
5.2 Yaxchilan Lintel 24. (After I. Graham and von Euw 1977, vol. 3:53. Peabody Museum Press. Copyright 1977 by the President and Fellows of Harvard College.)

The scene on Yaxchilan Lintel 24 depicts auto-sacrifice performed by a kneeling female. At her knees rests a woven basket that apparently holds blood-spattered paper and one end of a thorny rope, which she draws through her tongue. This bloodletting scene is as explicit as it can be, and it is clearly recorded in the second hieroglyphic clause at G1–G4. The verb is precisely that of the first text, and G2–G3 names the kneeling female, known as "Fist-Fish," who is also portrayed on Lintel 26 and was probably the wife of "Shield-Jaguar."

The act of pulling an object through one's tongue is well known from ethnohistorical records. Landa (1941:113) wrote, "[T]hey pierced their tongues in a slanting direction from side to side and passed bits of straw through the holes with horrible suffering." The Italian chronicler Peter Martyr (Lothrop 1926a, vol. 1:77) described a similar rite: "The priestes making a sign unto them, every one taketh his rasor, and turning their eyes unto the Idoll, they gash and wound their owne tongues, some thrust them through & the most part cut them so that the blood issueth forth in great abundance." Martyr's narrative is important in the identification of the dotted scrolls on the face of Lady "Fist-Fish" on Lintel 24. Mutilation of the tongue with a thorny rope would produce a large amount of blood, and Schele (1984a) first suggested that these markings are blood representations.

Lintels 24, 25 (fig. 5.11), and 26 were placed in Structure 33 at Yaxchilan. Although the specific events to which they pertain span well over two *katuns*, they may well represent three sequential stages of a bloodletting rite (Schele n.d.b). Lintel 24 depicts the actual performance of tongue mutilation, with the blood streaming on the woman's face, and Lintel 26 shows her after a similar act, with blood still present. The identification of rows of dots arranged to form scrolls appears conclusive and agrees with the other examples of similar markings. The main (right) figure of the Sáenz sculpture has similar scroll markings, but, in this case, they emerge from the ears. Ears, like tongues, are well-known sources of blood in sacrificial rites (Landa 1941:318).

Other monuments from Yaxchilan show an image of a standing ruler wearing a distinctive costume. A long, flowing-stream motif issues from his outstretched hands, presumably a liquid spilling into or on a basket or a stack of tied cloth. According to the interpretations of Proskouriakoff (1963), each sculpture is associated with a Period Ending or other anniversary date.



5.3 Yaxchilan Stela 1. (Photograph by Teobert Maler.)

Stela 1 (fig. 5.3) commemorates 9.16.10.0.0 1 Ahau 3 Zip, and the ruler "Bird-Jaguar" IV is the protagonist.

Stela 3 commemorates the one-*katun* anniversary of the accession of "Bird-Jaguar" I on 9.10.16.10.13 7 Ben 16 Zec.

Stela 4 (fig. 5.4) lacks a calendrical date, but it must date from the reign of "Bird-Jaguar" IV or "Shield-Jaguar" II, more likely the latter.

Stela 6 records the two-*katun* anniversary of the accession of "Bird-Jaguar" III on 9.11.16.10.13 5 Ben 1 Uayab.

Stela 7 (fig. 5.5), also lacking a date, names "Shield-Jaguar" II as its protagonist.

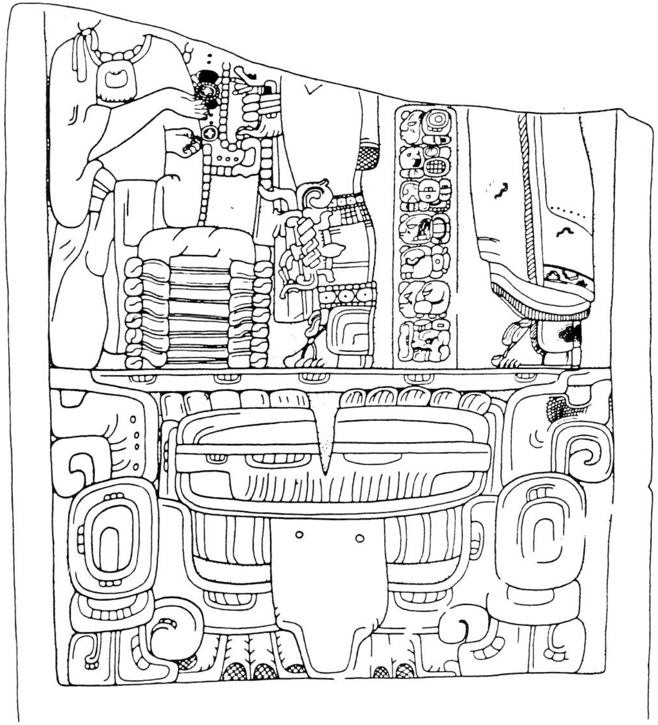
Stela 27, the earliest of the series, has the date 9.4.0.0.0 13 Ahau 18 Yax.

Stela 31, an incised stalactite, carries the Period Ending 9.16.0.0.0 2 Ahau 13 Zip. Placed in front of Structure 33, it is associated with "Bird-Jaguar" IV, just one *tun* before his accession.

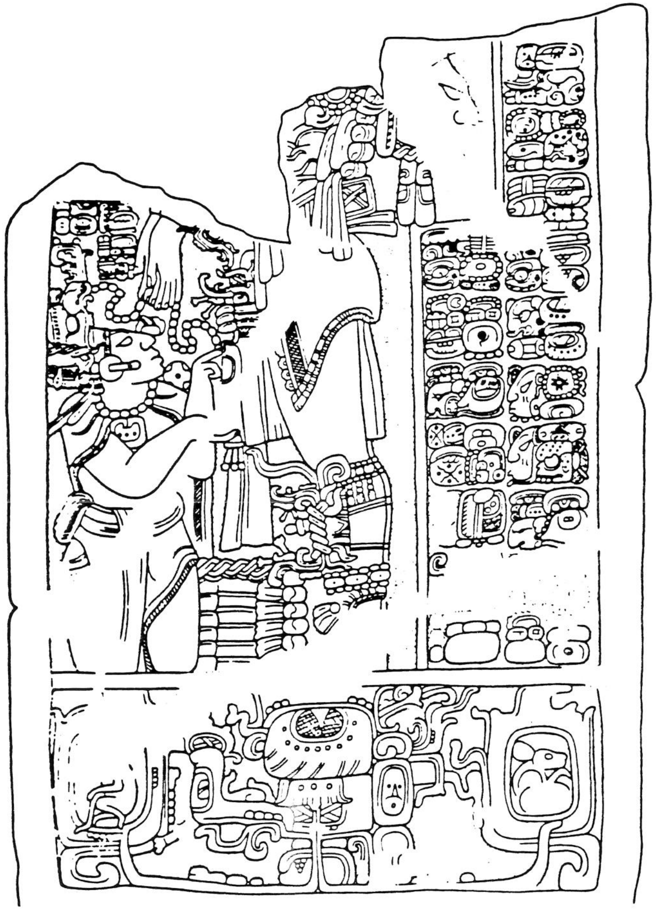
La Pasadita Lintel 2 (fig. 5.6) records the Period Ending 9.16.15.0.0 7 Ahau 18 Pop, in association with "Bird-Jaguar" IV.

Stelae 10, 18, 19, and 20 of Yaxchilan probably also belong to the same category but are too poorly preserved to confirm the relationship.

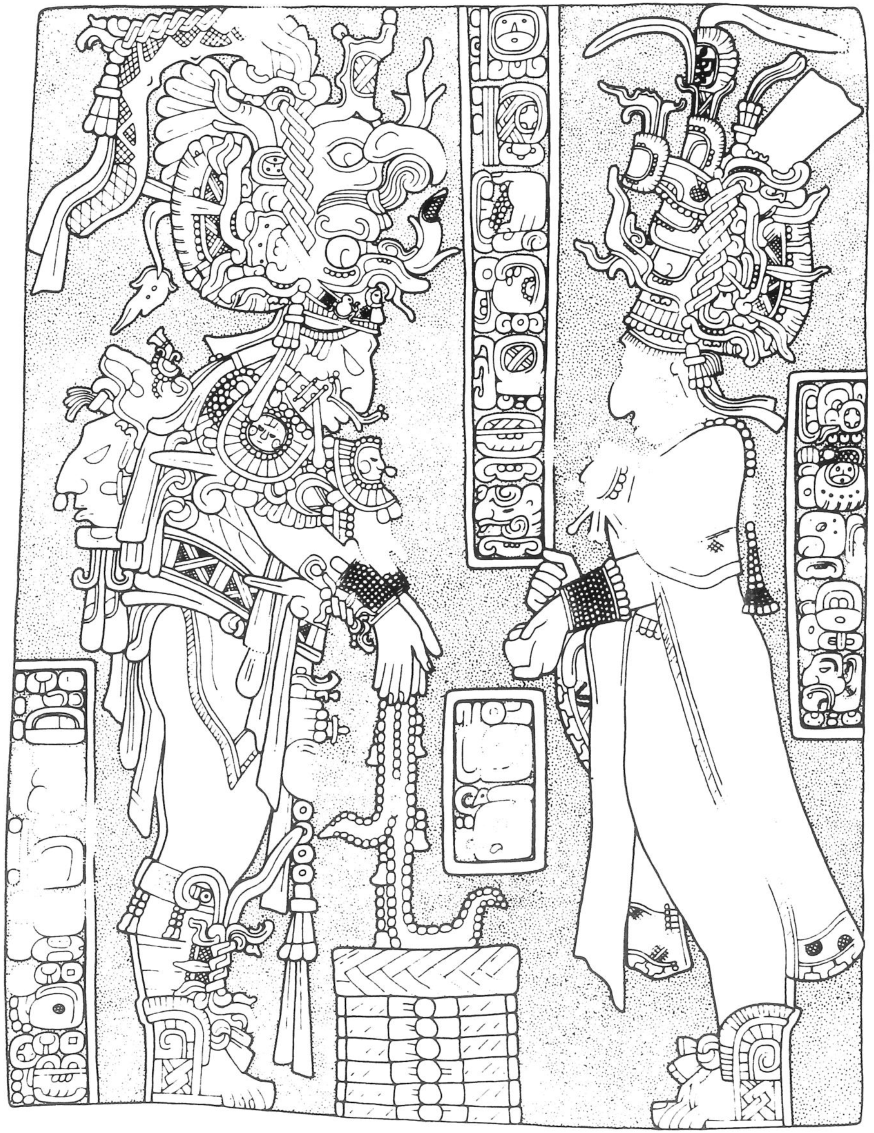
Yaxchilan Stela 1 (Fig. 5.3) has the most complete example of this iconographic program in the series. "Bird-Jaguar" IV is standing, facing right. From his hands a dot-



5.4 Yaxchilan Stela 4. (Drawing by David Stuart.)



5.5 Yaxchilan Stela 7. (Drawing by Ian Graham.)



5.6 La Pasadita Lintel 2. (Drawing by Ian Graham.)

ted stream flows onto what appears to be a cloth-bound basket. A subsidiary figure kneeling before "Bird-Jaguar" touches the liquid as it flows. Stelae 4 (fig. 5.4) and 7 (fig. 5.5) show similar figures, both of whom seem to place their bodies directly beneath the stream. M. E. Miller (1981:110, 1986) has noted that these presumably subservient figures, characterized by a white mantle and a *Spondylus*-shell necklace, are also shown in the murals of Room 1 at Bonampak, as observers of the child-presentation ceremony.

A generalized representation of the Maya heavens appears above the scene on Stela 1. A "skyband" runs horizontally across the monument to form the body of a double-headed creature. Attached to the bottom of the skyband are "star" signs and, somewhat unexpectedly, heads of the Jaguar God of the Underworld. Resting on all this is a central image of an apparent Sun God variant, flanked by cartouches, each of which contains a seated human figure holding a ceremonial bar. Such cartouches are, I believe, the Classic Maya counterparts of the Central Mexican "Sun-disk," which can also have figures placed within it. Many contexts strongly suggest, however, that the figures within the Maya cartouches are ancestors. Those on the Yaxchilan monuments would fit this interpretation (Proskouriakoff 1961:89). The left cartouche on Stela 1 encloses a female, presumably the mother of "Bird-Jaguar," and the right cartouche encloses a male, his father. Below the main scene on Stela 1, a panel shows a front-view portrait of the Sun God holding a two-headed ceremonial bar. Other sculptures in this series have different images in this position: Stelae 4 and 7, for example, have very elaborate representations of the main sign of the Yaxchilan Emblem Glyph.

The principal question in dealing with this series of monuments is that of the identification of the rite depicted in the main scene. In general, the accompanying texts reveal no specific reference to the action; they simply give a date and declare it to be an anniversary or Period Ending rite taking place under the ruler's auspices. Clearly, the scribes felt that the act depicted on each monument was self-explanatory; the inscriptions give only a context by which to understand the act.

Two exceptions to this way of presenting the material are found on Stela 1 and La Pasadita Lintel 2, where the main texts have as the verb the very common "hand-scattering" glyph. This verb is particularly associated with Period Endings, and its presence in these texts is not surprising. The connection between "hand-scattering" and the scenes on the sculptures is clear; the hieroglyph is a written depiction of the action. It seems that little new information has been given and that the hieroglyph sheds no light on the meaning of the ritual or what it involves. We still do not know what is being "scattered" or sprinkled on the baskets and attendant figures.

Answers might be obtained from an analysis of the flowing images. The streams that fall or are "scattered" from the hands on these eight monuments give a clue to the subject matter. In the examples illustrated, the borders of the streams are dotted and have "bone" or "bead" elements attached to the sides. Within the borders, the hieroglyphic elements *kan* (T281) and *yax* (T16) alternate throughout the motif. In the stream of Stela 4, the *kan* sign is placed in the center of a "completion" sign (T173). The dotted borders of the streams, however, relate them to the blood motifs described above as facial markings. A costume element of the rulers on each monument reinforces the identity of these streams as blood: placed at the groin of each figure is an inverted view of the instrument identified by Joralemon (1974) as a bloodletter. This is the object associated exclusively with the act of auto-sacrifice by means of penis perforation.

These associations help to define some of the specific motifs in the representation of blood: dotted lines or borders and *kan*, *yax*, or "completion" signs within the motifs, at least in the case of falling streams.

THE "BLOOD GROUP," THE "SCATTERING" RITE, AND THE "PADDLER" GODS

Thompson (1950:276) noted that the stream motif, which he and many others believed to represent water, is found also as an extremely common hieroglyphic element, which he dubbed the "water group" (see fig. 5.7). Based on the evidence above, it would seem more accurate to identify the Yaxchilan streams as blood. The hieroglyphic equivalent of these motifs should also be a blood motif, or "blood group." Eduard Seler (Kelley 1976:215) made this identification.[1]

The "blood-group" element is intimately associated with the hieroglyph of God C, which is rarely seen without this prefix. God C would seem to be an extension of the meaning of the blood group—the head of God C with the blood-sign prefix has the same meaning as the blood sign alone. In many inscriptions, the blood-group sign is replaced by itself prefixed to God C (fig. 5.8). One example comes from a bloodletting expression in the Cross Group at Palenque (fig. 5.8b); it supports, in contextual terms only, the blood identification of the sign.

The association of the blood group and God C with bloodletting glyphs is not uncommon. A substitution is seen in examples of the G1 glyph of the nine-day calendrical cycle, or "Nine Lords of the Night" (fig. 5.9a). The G1 glyph always carries a coefficient of 9 (the significance of which is not known) and usually consists of an outstretched hand with the thumb up. Three examples of the G1 glyph are now known in which the "fish-in-hand" glyph (fig. 5.9b), a common bloodletting verb in other contexts (Proskouriakoff 1973), substitutes for the hand with God C. The hand with God C must have the same meaning as the "fish-in-hand" and probably functions as a bloodletting verb.

The theme of Yaxchilan Lintel 15 (fig. 5.10) is clearly bloodletting. The text has

---

[1] I thank Stephen Houston (personal communication, 1983) for showing me this reference.

''fish-in-hand'' as the main verb, and the scene shows a woman who kneels with a woven basket containing bloodletting paraphernalia. Before her, a human figure emerges from the mouth of a fantastic serpent, which floats above a bowl of blood-stained paper.

On Lintel 25 (fig. 5.11), behind a similar serpent, there is an S shape with a partially crosshatched interior. The inscription opens with the date 5 Imix 4 Mac, or 9.12.9.8.1, that of the accession of ''Shield-Jaguar'' I, who is named by glyph A2. The verbal phrase B1–E1 contains no specific accession statement, but deals with a bloodletting event inherent in the ''fish-in-hand'' glyph, at B1a, denoting perhaps the act of auto-sacrifice by the person taking office.

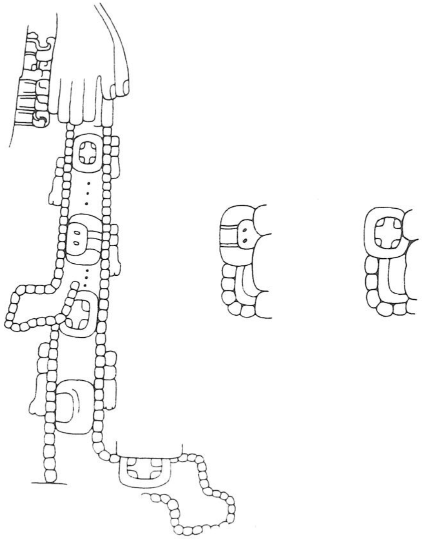
The scene is similar to that on Lintel 15, though more elaborate. The main figure is a warrior who emerges from the open jaws of a skeletal bicephalic serpent, which floats in space above a small bowl of blood-stained paper. I think it is clear that the warrior is ''Shield-Jaguar'' portrayed in a supernatural state. Kneeling before him and the serpent is Lady ''Fist-Fish,'' who holds a bowl of bloodletting equipment and the headdress used on occasions of auto-sacrifice. These objects either are being offered to ''Shield-Jaguar'' or have already been used, if the scene occurs after the ceremony.

We know from the examples of the blood motif already discussed that the dotted borders of the S shape on Lintel 15 are diagnostic markings. The S-shaped element on Lintel 25, though it occupies the same relative space as that on Lintel 15, has little visual resemblance to it, since it has no dotted border. The Lintel 25 motif, however, exhibits other attributes of blood representations—the *kan* cross and the ''completion'' sign. The S-shaped element on Lintel 25, moreover, is crosshatched in the areas not occupied by *kan* or ''completion'' signs, thus signifying that it possesses some quality of ''darkness.''

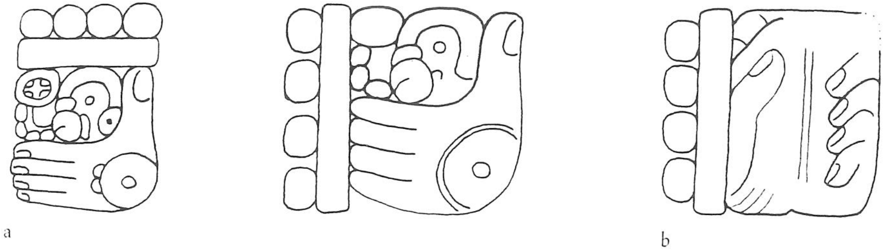
Despite the differences between the S-shaped motifs of Lintels 15 and 25, I feel that they represent the same thing. They occupy the same positions in their scenes, and, in light of the dotted border on one example and the two glyphic signs on the other, these two motifs—although different— are consistent with other representations of blood in Maya art. Such an identification for these two motifs would befit the obvious bloodletting themes of each sculpture. The absence of the dotted border is not unique; this type of variation in blood images can be seen in examples of the blood-group hieroglyphic sign.

The Yaxchilan S-shaped blood motif can be traced to a number of Peten monuments that date to the Terminal Classic period.

Ucanal Stela 4 (fig. 5.12), because of its preservation, is an important monument of this group. It carries the date 5 Ahau 3 Kayeb, or the Period Ending 10.1.0.0.0. Two figures, each in identical costume and holding a God K scepter, stand upon a captive. On the basis of the verb in the accompanying text (B2) and the gesture of the figures, it seems that this monument celebrates a ''scattering'' event, which, at Yaxchilan, sig-



5.7 Hieroglyphs of the "water group." (Drawing by David Stuart.)



5.9 Substitutions involving the "blood group" and God C in Glyph G1. a. Glyph G1 with God C and the "blood-group" prefix. b. Glyph G1 with the "fish-in-hand." (Drawings by David Stuart.)

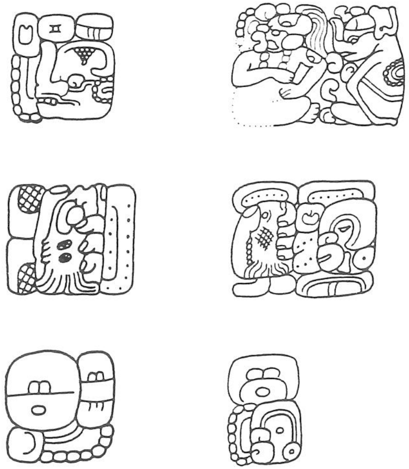
nifies bloodletting. Above, a human figure in warrior garb (with *atlatl* and darts) floats within an S shape with dotted borders.

Jimbal Stela 1 (fig. 5.13) records the date 2 Ahau 13 Ch'en, or 10.2.10.0.0. A ruler stands with his head in profile as he holds a shield and a God K scepter. Above him, as on Ucanal Stela 4, float two small Roman-nosed supernaturals, who rest on dotted S-shaped motifs. The verb in the text is 'scatter' (A2, B2, and Y1), but the image does not show this action.

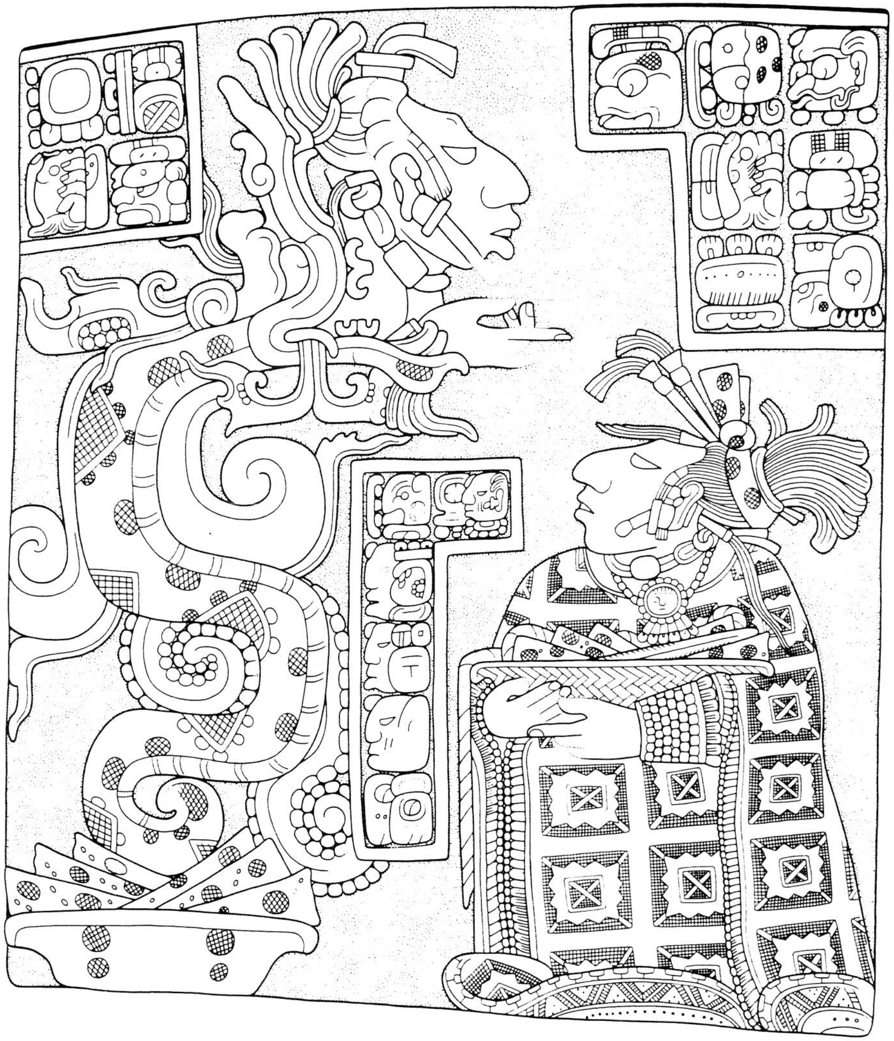
Ixlu Stela 1 (fig. 5.14) dates to 4 Ahau 13 Kankin, or 10.1.10.0.0. The sculpture depicts a profile figure who holds a staff with four sets of three bow-tie knots, common in scenes of "scattering" ceremonies from Tikal. The ruler performs a "scattering" rite. Sitting behind him is a bearded subsidiary figure who holds an unidentified object. Above floats a complex scene of four figures in S shapes and dotted scrollwork. Two of the figures appear to be human warriors, as at Ucanal, and the other two seem to be Roman-nosed deities like those from Jimbal.

Ixlu Stela 2 (fig. 5.15) seems to be late also, but the date has not been securely deciphered. The sculpture shows a central figure standing in profile and holding a God K scepter as he "scatters" with the other hand. Floating around him are four supernaturals in dotted S-shaped motifs. As on Ixlu Stela 1, two are human warriors and two are Roman-nosed deities.

All these Terminal Classic monuments depict very similar images, consistently portraying supernatural beings suspended within dotted S shapes above the standing ruler. At Yaxchilan, such S shapes, dotted or not, represent blood that frames the supernatural images with which they are associated. I would assign a similar function to these late Peten images. The warrior figures (also reminiscent of Yaxchilan Lintel 25) and the Roman-nosed pair are floating in what I view as blood, but in an abstract, unrealistic form. Blood is presented here as a physical background for supernatural beings, as it was at Yaxchilan.

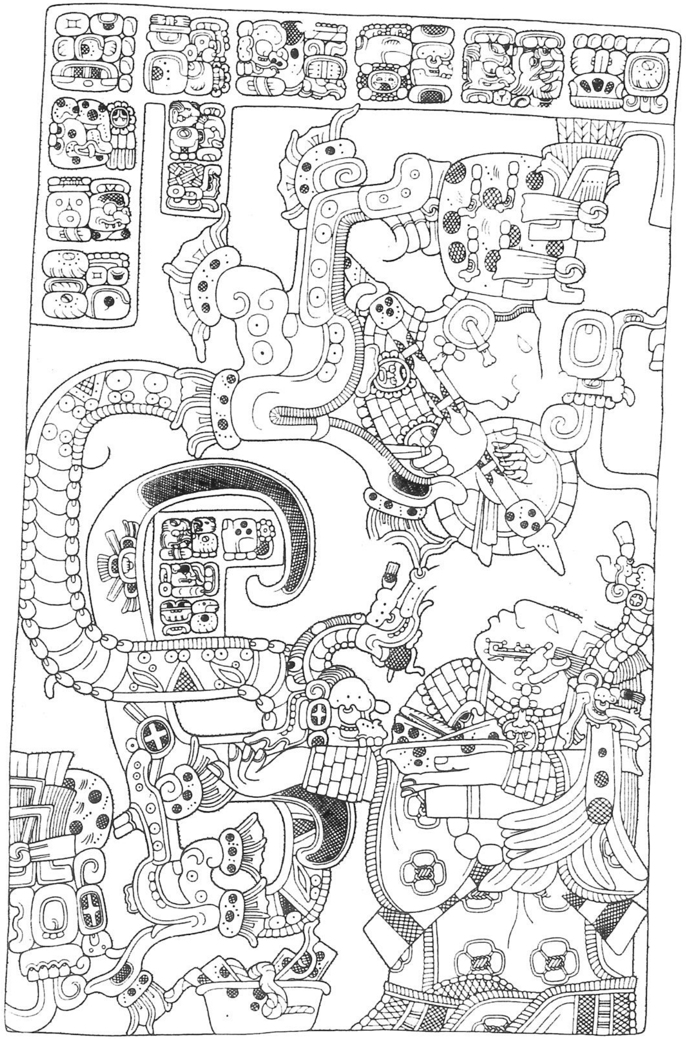


5.8 The "water-" or "blood-group" sign with God C. (Drawing by David Stuart.)

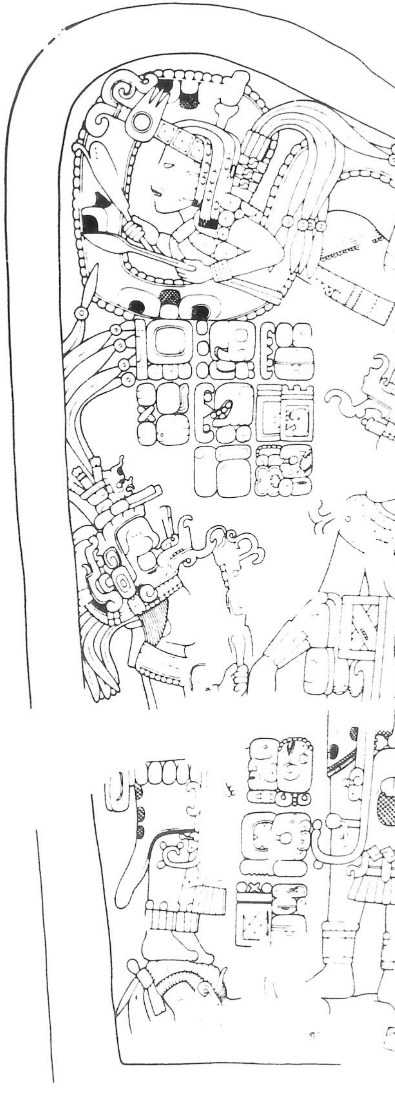


5.10 Yaxchilan Lintel 15. (After I. Graham and von Euw 1977, vol. 3:39. Peabody Museum Press. Copyright 1977 by the President and Fellows of Harvard College.)

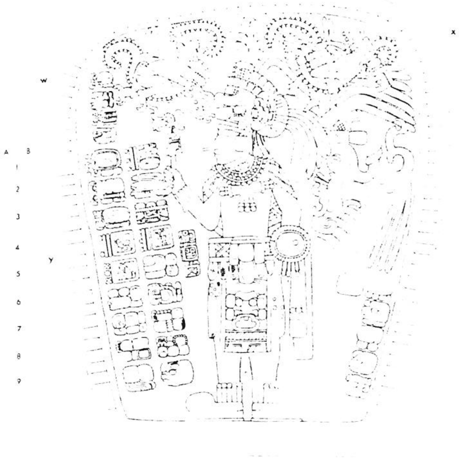
UNIVERSIDAD NACIONAL DE EDUCACION A DISTANCIA



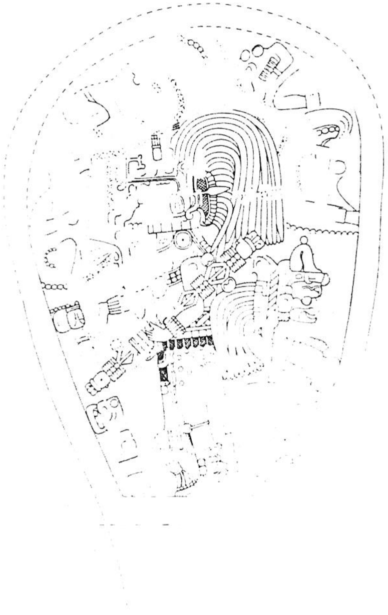
5.11 Yaxchilan Lintel 25. (After I. Graham and von Euw 1977, vol. 3:35. Peabody Museum Press. Copyright 1977 by the President and Fellows of Harvard College.)



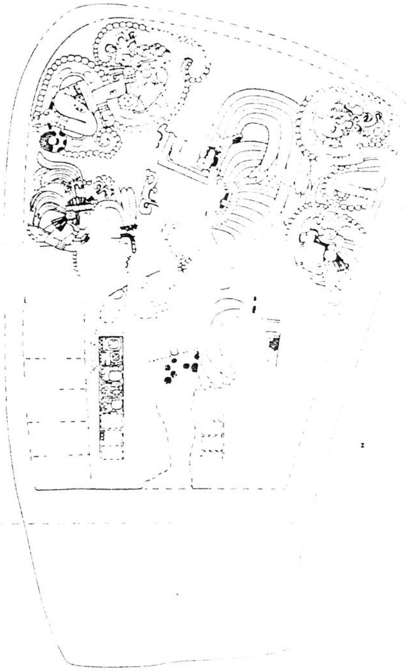
5.12 Ucanal Stela 4. (Drawing by Ian Graham.)



5.13 Jimbal Stela 1. (Drawing by W. R. Coe, in Jones and Satterthwaite 1982:fig. 78. The University Museum, University of Pennsylvania.)



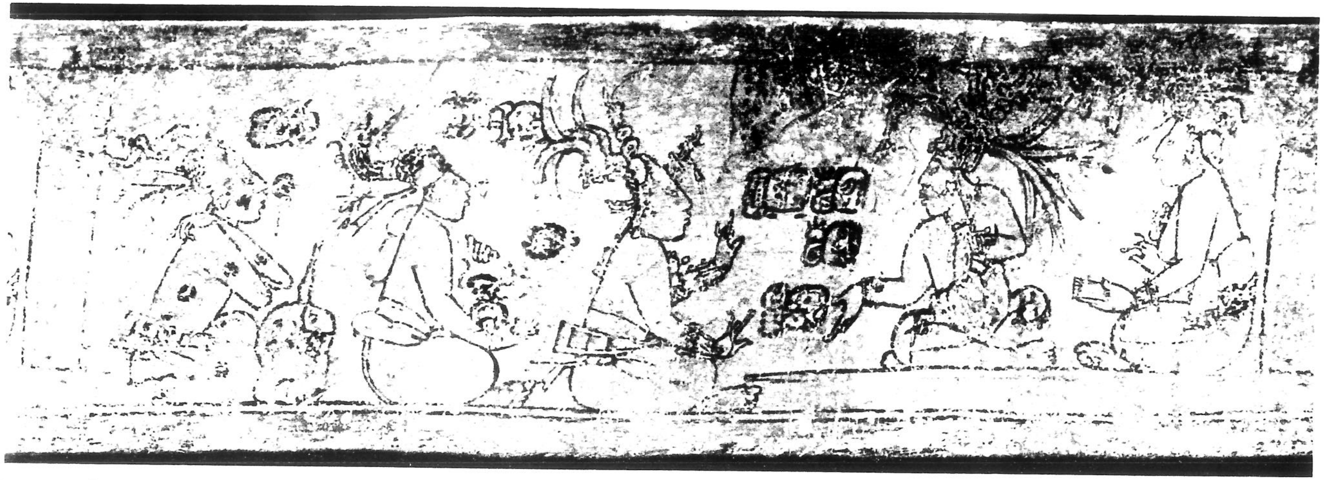
5.14 Ixlu Stela 1. (Drawing by W. R. Coe, in Jones and Satterthwaite 1982:fig. 80. The University Museum, University of Pennsylvania.)



5.15 Ixlu Stela 2. (Drawing by W. R. Coe, in Jones and Satterthwaite 1982:fig. 81. The University Museum, University of Pennsylvania.)

The main event or rite shown on these monuments is "scattering." 'Scatter' was the main verb in the texts of Yaxchilan Stela 1 and La Pasadita Lintel 2. It can be said, on the basis of what is now known about the significance of these monuments, that "scattering" can work, in at least some cases, as a verb for bloodletting.

A "codex-style" vase (fig. 5.16) supports the bloodletting sense of the "scattering" glyph. The vessel shows a seated lord, presumably the chief figure portrayed, gesturing in the manner of "scattering" depictions. Next to his hand is the glyph of God C with the blood-group affix. The glyph appears also to conclude the short text accompanying the scene. It may function with both text and scene. I believe that this vase



5.16 "Codex-style" vase showing "scattering" event, detail. (Photograph copyright Justin Kerr, 1976.)

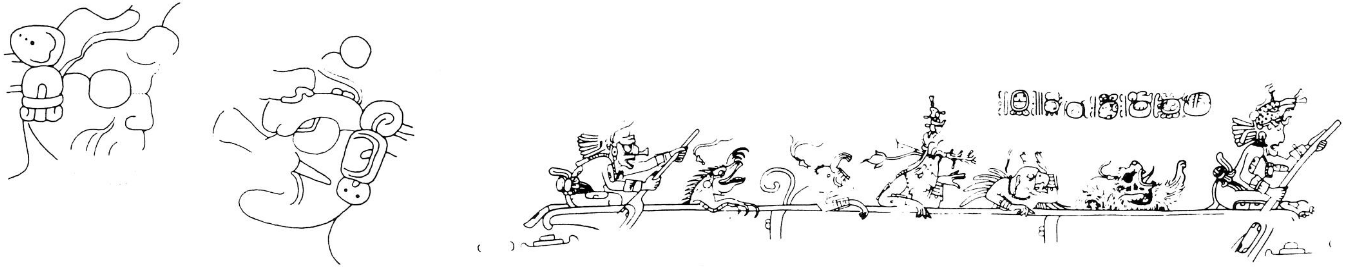
shows a "scattering" scene, with the blood (God C) glyph used in place of the more common stream or trail of dots, the iconographic blood group. Such a substitution would be an excellent example of the inseparability of the writing system and the artistic symbol system.

The linguistic evidence seems to indicate that "scattering" was confined to the use of liquids (Stuart 1984). The few existing examples of the "scattering" glyph with phonetic complements suggest a value *mal* as the linguistic root for the reading of the glyph (Kelley 1976). On the basis of the glottochronology involved in tracing the root back to Classic times, it would seem that *mal* meant 'to spill, sprinkle [liquids],' as it does in many Mayan languages today.

The nature of the rite can perhaps be illuminated by a description of a ceremony that took place shortly after the conquest. In the testimony of Melchor Uc, we find: "Before he was baptized [as a Christian] he sacrificed and drew certain blood from his genitals and threw it on the ground" (Scholes and Adams 1938:58). This appears to be a description of the "scattering" act depicted on numerous Classic monuments.

On the basis of hieroglyphic, linguistic, and ethnological evidence, I conclude that "to scatter" is, more precisely, "to sprinkle" or "spill" one's own blood. In many cases, the "scattering" action was, I believe, a general bloodletting event, not the offering of copal or corn grains, as has been suggested.

Returning to the Ucanal, Jimbal, and Ixlu monuments, I think it can safely be said that the subject of each scene is the auto-sacrifice of the ruler on the given Period Ending date.

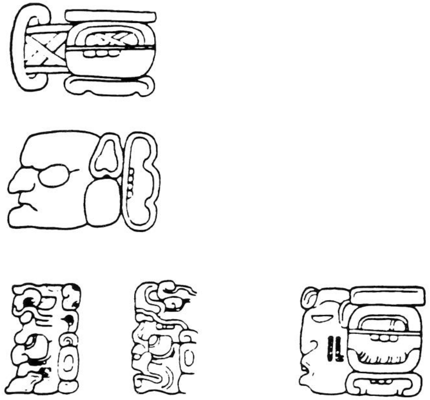


5.17 The "Paddlers." *Left*: Portraits on Ixlu Stela 2. (Drawing by David Stuart.) *Right*: On an incised bone from Tikal Burial 116. (After Trik 1963:fig. 3a.)

The connection between a bloodletting rite by the ruler and the supernaturals shown in blood above him is no coincidence. The blood image in which the deities rest is presumably the blood of the ruler who celebrates the Period Ending by self-sacrifice. The "floaters" might be thought of as an inherent part of the king's blood. A reasonable hypothesis is that these figures are mythical or historical ancestors, an identification that would complement the "label" of the figures placed in cartouches above the ruler on bloodletting monuments of Yaxchilan. On the Terminal Classic monuments, these floaters are ancestors who inhabit or are synonymous with the blood of the king—who are, in effect, made manifest by the act of auto-sacrifice.

I have noted the consistency in the identities of the floating deities and their probable function as blood ancestors on the monuments from Ucanal, Jimbal, and Ixlu. The best-preserved portraits of the pair of Roman-nosed deities appear on Ixlu Stela 2. They are shown in their respective blood icons at the upper left and right corners (fig. 5.17a). The left figure is marked by a large, round eye, a jaguar-head cap, and feline paws and tail. These identify him as the Jaguar God of the Underworld. The right figure also has a round eye, but his distinctive traits include a fish-head(?) cap and a bone or stingray spine placed through his septum.

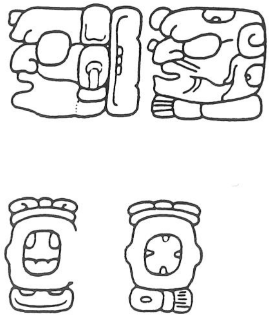
This pair of gods is common in Maya art and writing. Mathews (1977) first identified the many contexts in which they appear, including their roles as paddlers of the sinking canoe on the famed incised bones of Tikal Burial 116 (fig. 5.17b). The most abundant references to these "Paddler Gods" come from hieroglyphic texts, which, like the Ixlu and Jimbal examples, are usually associated with Period Ending dates. The most readily recognizable glyphic names for the Paddlers are simple portrait heads; examples are found on Jimbal Stela 1, in the secondary texts that accompany their portraits (fig. 5.18, *top*). The second glyph in each text is the portrait name, and, in the case of the Jaguar God, the name is suffixed by the hieroglyphic sign T23, a phonetic *n(a)*. The portrait name of the other god also has a suffix, but it is too damaged to make out. Other examples show the sign *ti* in this position. Also of note is the apparent title



5.18 Hieroglyphic names of the Paddlers. *Top*: On Jimbal Stela 1. *Bottom*: On Sacul Stela 1. (Drawings by David Stuart.)

following the name, consisting of T4, another phonetic *na*, the number 5, and T561, *caan* or *chan*, 'sky.'

The portrait name glyphs are found also on the excellently preserved Stela 1 of Sacul, Guatemala (fig. 5.18, *bottom*). The jaguar and fish attributes of the gods are clear, but these examples lack the suffixes noted at Jimbal, which are perhaps phonetic complements to the linguistic readings of the names. The "*na*-5-sky" compound is also present at Sacul (where yet another form substitutes for the *na*) and seems to be a title closely associated with, but not exclusive to, the Paddlers. This glyph can also accompany the names of other deities.



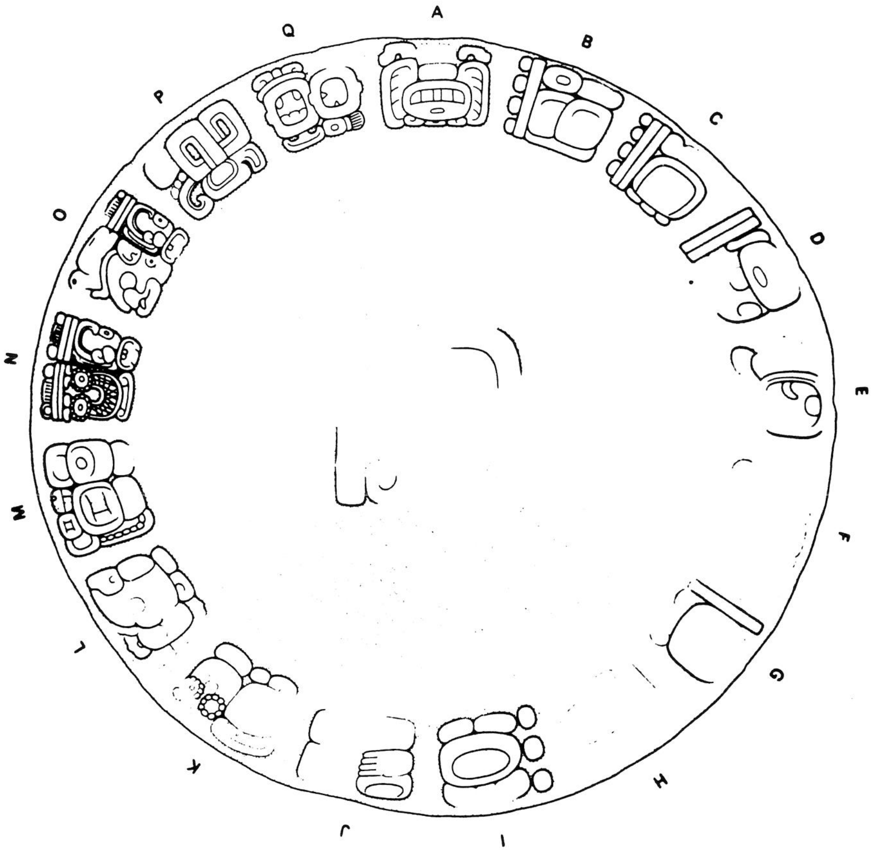
5.19 Other hieroglyphic names of the Paddlers. (Drawing by David Stuart.)

The hieroglyphic names of the Paddler Gods can take one other form (fig. 5.19): the *na* and *ti* suffixes remain, while the portraits are replaced by "*akbal*" and *kin*, respectively. The equivalence of these glyphs with the names is well established, and it appears that these forms are as common as the portrait names, if not more so.

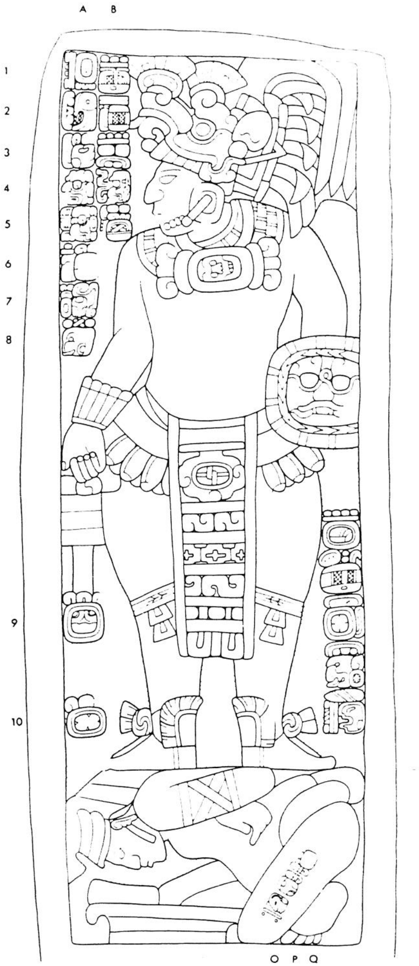
This identification allows us to find new instances of the Paddler Gods. Tonina Monument 110, for example (fig. 5.20), demonstrates the association between the Paddlers and Period Ending dates, or, more specifically, the "scattering" rite. The inscription mentions this bloodletting act performed by the contemporary Tonina ruler (glyph L; Mathews 1982); there is some sort of relationship between this act and the Paddlers who are named later in the text. The text describes bloodletting as the main act of the ruler, and the presence of the Paddler names implies, I think, the notion that is given iconographically on the stelae of Ixlu and Jimbal. The "scattering" act results, literally, in the existence of the Paddlers. This Tonina text and all other Paddler references with "scattering" events are simple written versions of what is seen visually at Ixlu and Jimbal.

The bloodletting association of the Paddlers can be traced next to Naranjo Stela 19 (fig. 5.21). This text tells of a "scattering" rite by the local ruler at 9.17.10.0.0 12 Ahau 8 Pax, and the portrait shows the king in the posture appropriate for this ceremony. The inscription records the "scattering" (A2), followed by the names of the ruler (B3–A7). Glyph A8 is T1.757, or what Schele (1982:26) terms the "general verb." This glyph records no specific action but introduces names and even Calendar Round dates at the beginning of texts. On Stela 19, it seems to introduce the "*akbal*" and *kin* Paddler names at A9 and A10. The Paddlers' names, while apparently part of the running inscription, are found in an unusual position—below the right hand of the standing ruler and the "bag" or other object that he holds as equipment for his act.

This interaction between text and scene is much like that on the "codex-style" vase, where, in the "scattering" scene, a God C glyph replaces the blood image issuing from the figure's hand. Here, the names of the Paddlers take that position. The Paddlers, referred to only by their glyphs, are shown in relation to the "scattering" ceremony as if they were full-figure actors in the event. They are named at this place in the scene because they are what is being "scattered"; that is, they are synonymous with the blood of the king.


A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q

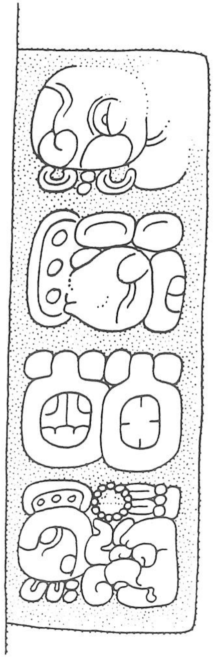
5.20 Tonina Monument 110. (Drawing by Ian Graham.)


A B
1
2
3
4
5
6
7
8
9
10
O P Q

5.21 Naranjo Stela 19. (After I. Graham and von Euw 1975, vol. 2:49. Peabody Museum Press. Copyright 1975 by the President and Fellows of Harvard College.)

The Naranjo example would be a logical extension of the complex involving the floaters on the monuments of Ixlu and Jimbal. While those sculptures were explicit in showing the Paddlers in the ruler's blood, Naranjo Stela 19 would be giving the same message, but utilizing other symbolic methods. It is clear that there is a good reason for this placement of the Paddlers, if only to emphasize the association between the two gods and the act of auto-sacrifice.

Stela 25 of Dos Pilas, Guatemala, records the Period Ending 9.14.0.0.0 6 Ahau 13 Muan and its celebration by the ruler "Shield-God K," the second known ruler of the Dos Pilas sequence (Houston and Mathews 1985). The texts at Dos Pilas, when recording such Period Endings, always, to my knowledge, record a "scattering" bloodletting rite by the ruler; the only exception is this monument, which records no "scattering" in its main text, but only notes the "completion" of 14 *katuns* under the auspices of the ruler. Because the scribes of Dos Pilas were apparently very careful to record "scattering" rites, one would expect a bloodletting reference somewhere on Stela 25; a secondary text (fig. 5.22) is very probably such a reference.



5.22 Dos Pilas Stela 25, secondary text. (Drawing by David Stuart.)

This secondary text comprises four glyphs arranged vertically at the side of the ruler's portrait. The first glyph is the "upended-frog" event recognized as 'birth' by Proskouriakoff (1960); it is properly affixed in verbal form by T126 and T181. Following the 'birth' verb are two glyph blocks in which one would expect the name of the subject, or the name of the one who was born. The third glyph block gives the name—or names—of the subject. The two glyphs of this block are recognizable as the "*akbal*" and *kin* forms of the Paddlers' names. According to this text, it would seem that the Paddlers 'were born' on this day.

The last of the four glyph blocks consists of the common compound *u cab*, the specific meaning of which is not yet completely understood. The name of the ruler "Shield–God K" closes this text. The presence of *u cab* is significant. This glyph often immediately precedes the name of rulers or other persons who have some power over the name or event recorded before it. For example, *u cab* is known in statements of capture, where it separates the captive's name from that of the captor, presumably to mark the relationship between the two, or the act of capture itself. The *u cab* is also known to introduce a ruler's name immediately after a Period Ending statement, which also suggests the power of the ruler over that Period Ending celebration. A working decipherment of *u cab* might be 'under the power of' or 'under the auspices of.'

The secondary text of Stela 25 would then read: 'Were born (A5), the Paddlers (A6, A7), under the auspices of (A8), "Shield–God K" (A8b).' The fact that the Paddlers were "born" would indicate that this was not a birth in the natural sense but in a metaphorical one. Many references to the Paddlers predate this "birth" date at Dos Pilas, so the event presumably does not record the mythical birth, as is the case with the Palenque Triad in the Cross Group Tablets at Palenque. The birth of the Paddlers 'under the auspices' of the ruler "Shield–God K" suggests that this is a metaphorical reference to bloodletting, a substitution for the less metaphorical "scattering" verb found on every other Period Ending monument at Dos Pilas.

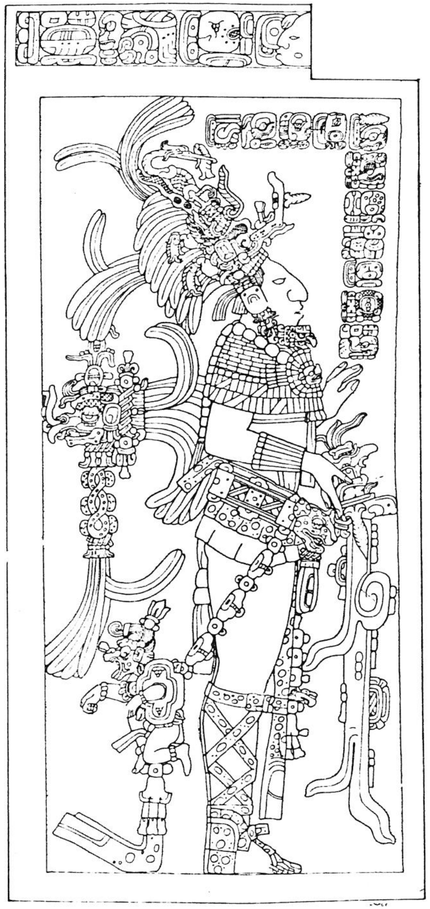
This "birth" metaphor recalls the representations of the Paddlers and other ancestor figures at Ixlu and Jimbal. Those supernaturals, as noted, were shown as small figures (their size may have emphasized the metaphor) who floated within the blood of the ruler who stood below. The "scattering" act not only released the blood, but, to the Maya, it also released (i.e., gave birth to) the ancestral gods who were part of that blood, thus defining the ruler's source of political and social power.

Palenque texts in which the ruler is referred to, through female parentage expressions, as the "mother" of the Palenque Triad gods (Schele, Mathews, and Lounsbury 1977) relate to this metaphor. It might reflect a belief that the ruler "nursed" or "nurtured" the gods through auto-sacrifice, which would help explain, for instance, the female costume often worn by male rulers in bloodletting contexts (e.g., Copan Stela H). Such a metaphor is comparable to the birth reference of Dos Pilas Stela 25 and must rest on the same basic idea. The female parentage expressions in reference to rulers might be more specifically tied to the notion of "giving birth" through bloodletting than through nurturing, but it probably relies on both concepts.

THE CELESTIAL MONSTER AND THE QUADRIPARTITE GOD

The West Sanctuary Panel of the Temple of the Cross at Palenque (fig. 5.23) portrays "Chan Bahlum" (Mathews and Schele 1974) standing in profile view and holding in his hand the inverted head of the Quadripartite God, noted by Spinden (1913:67) and discussed in detail by Greene Robertson (1974a). The *kin* sign in the forehead of this god suggests a strong relationship to the Sun. Out of the top of the inverted head falls a long stream of liquid, but the image is foliagelike. Spinden suggested that this stream represents water, but the presence of "beads" and the *kan* and "completion" signs on this falling stream would equate it with the blood stream identified at Yaxchilan. This example, like that of Yaxchilan Lintel 25, lacks the dotted border; the border seems to be infrequent in the more abstract or supernatural contexts suggested here by the presence of the Quadripartite God. The theme of the west sanctuary panel appears to be bloodletting by the ruler "Chan-Bahlum."

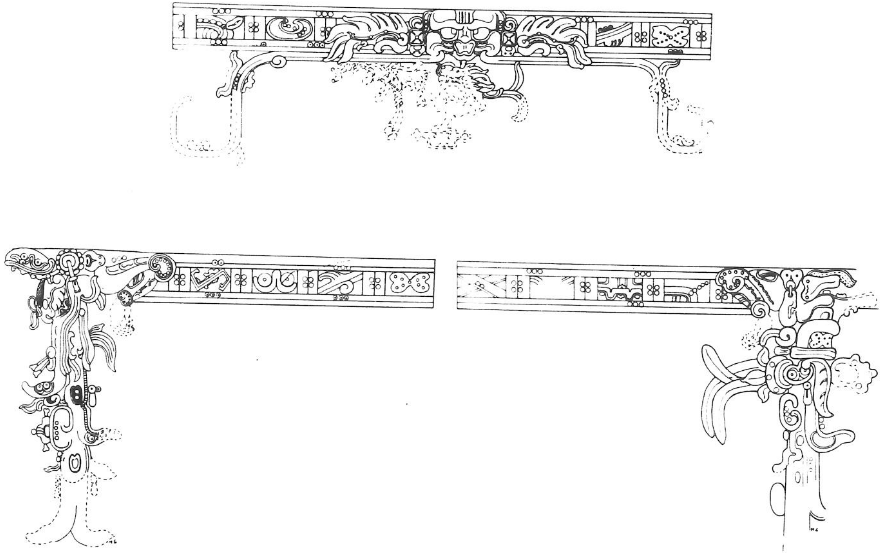
The association between the putative blood stream and the Quadripartite God is common in Maya iconography. The Quadripartite God is found most frequently as the rear head of the two-headed dragon, or "Celestial Monster." This being can be portrayed in many ways, but, in all representations, the Quadripartite God is present. The designation of the rear head of the Celestial Monster for the god's position may be misleading, for many images show the Quadripartite God inverted and attached to the back or the rear of the monster. The Celestial Monster appears to be a single-headed beast, with the head of a different character placed on his rear, although some images



5.23 Palenque, West Sanctuary Panel of the Temple of the Cross. (Drawing by Linda Schele.)

that are abstract or clouded by the associated symbolism (as on Copan Temple 22 sculpture) tend to show no distinction between "front" and "rear" heads.

The Celestial Monster has long been known to have general cosmological associations. Its body is commonly shown as a skyband, an example of which is the stucco representation in the interior of House E of the Palenque Palace, above the north doorway (fig. 5.24). At its center, the "serpent bird" faces outward. The inverted rear head of the Quadripartite God is present, and out of it falls a stream identical to that flowing from the sanctuary jamb panel of the Temple of the Cross. It is as if the Quadripartite God held by "Chan-Bahlum" were placed directly on this skyband. The stream certainly represents blood, for not only is it visually and iconically identical to that of the Temple of the Cross panel, it occupies the same relative space. Moreover, the front head of the skyband has the same stream spilling from its mouth and a *yax* sign as a probable "blood" diagnostic. The skyband and falling blood streams form a symmetrical frame over the doorway, which suggests that the two heads attached to the skyband function on a level of equal importance and emphasize the true "two-headedness" of the creature. In this example, we have in direct association two semantic images: the skyband—a general cosmological symbol—and blood. The relationship



5.24 Palenque, Stucco in House E of the Palace. (Drawing by Merle Greene Robertson.)

might be even more direct, in view of the fact that the blood falls *out* of the mouth of the skyband monster.

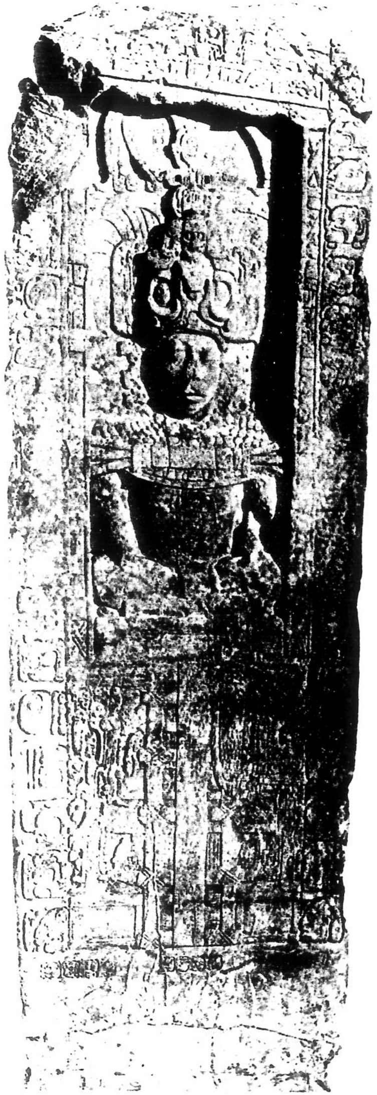
The iconography of the accession monuments at Piedras Negras is virtually identical. Proskouriakoff (1960) showed that each of these stelae—6, 11, 14, 25, and 32—begins a discrete series of monuments erected by a particular ruler, and that the image on the front of each depicts the act of accession. Stela 6 (fig. 5.25), the first monument in the reign of "Ruler 3," is typical. It shows the ruler seated in frontal view within a niche created by a framing skyband. Below the image of the ruler is an assemblage of cosmic motifs, consisting of water, earth, and sky. Superimposed on these is the scaffold of the structure that the ruler sits on and a ladder over which is draped a cloth(?) with footprints ascending to the niche.

The skyband that forms the niche and makes up the greater part of the cosmic imagery on Stela 6 is similar to the example from Palenque House E, in that a serpent bird is perched upon it. Below the niche, the skyband forms the body of a Celestial Monster. The band runs horizontally, with heads—those of the Celestial Monster and the Quadripartite God—at either end, identical to those at Palenque; from the mouth of each spills a beaded, flowing motif that is certainly the blood stream.

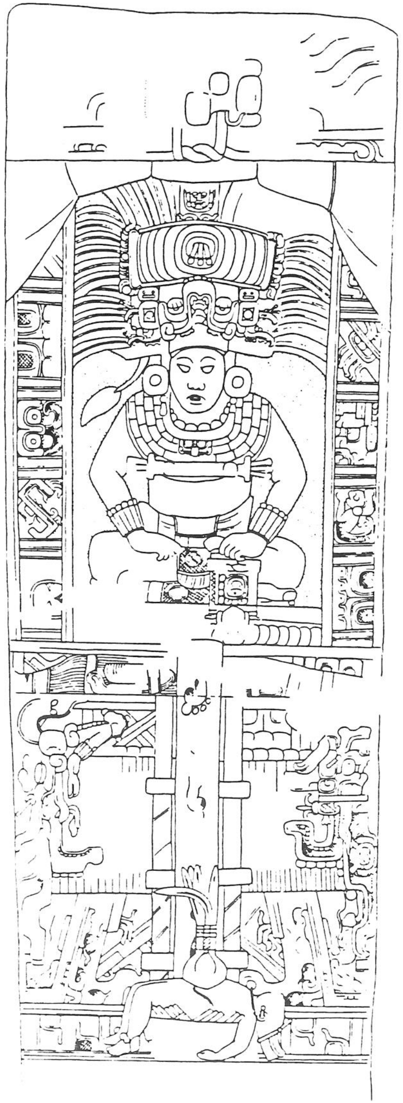
Each of the other Piedras Negras "ascension" monuments bears a representation of the Celestial Monster similar to that on Stela 6, in an identical structural position. In most examples, a blood stream falls from the mouth of the front head and from the top of the inverted Quadripartite God. The blood motifs can vary somewhat. On Stela 11, the stream is crosshatched (fig. 5.26), and a "completion" sign helps to secure its identification as blood.

The "niche," or "ascension," monuments discussed by Proskouriakoff are especially important, for they portray the components of the Maya cosmos—water, earth, and sky, in their respective places. Not only do these monuments commemorate the first Period Ending in a given ruler's reign, they also place that ruler within the cosmological framework, where he takes a central position. This universe, however, is not made up solely of water, earth, and sky, but also of blood—specifically, that of the ruler.

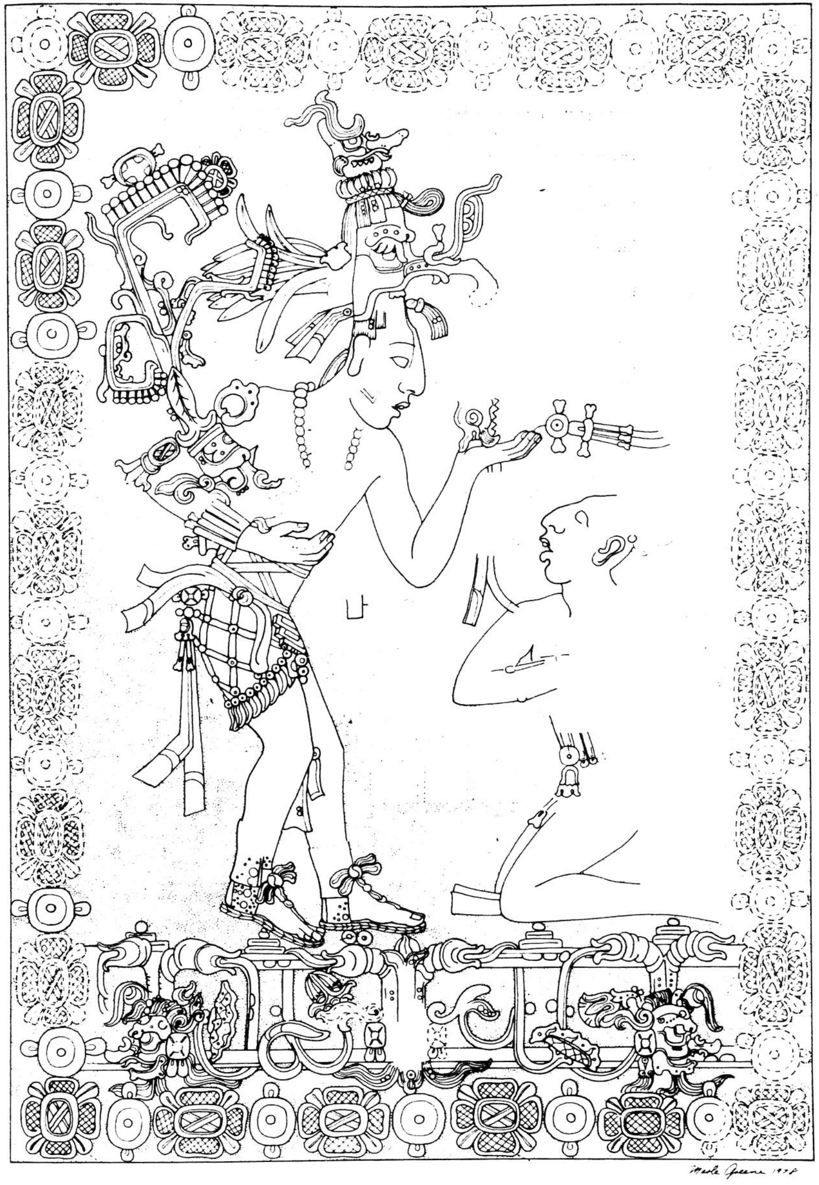
"Chan-Bahlum's" bloodletting scene on the sanctuary panel of the Temple of the Cross is one of the few instances in which the Quadripartite God seems to work as a distinct iconographic entity without association with the Celestial Monster. Another example is found on the stucco sculpture of Pier C of Palenque House D (fig. 5.27). The figure at the left holds in his arm the head of the Quadripartite God; out of the top of the head emerges a square-snouted serpent, perhaps related to the "Zip Monster." Spinden (1913:45) noted that this creature seems to possess foliage characteristics. Two other serpents seem to sprout from the head as branches of the dominant serpent image. Their squared, bent-back snouts are depicted as beaded with what seems to be jade, like the wristlets and anklets on human representations at Palenque. The large,



5.25 Piedras Negras Stela 6. (Photograph by Teobert Maler.)



5.26 Piedras Negras Stela 11. (Drawing by David Stuart.)


Merle Greene 1978

5.27 Palenque, Pier C of House D of the Palace. (Drawing by Merle Greene Robertson.)

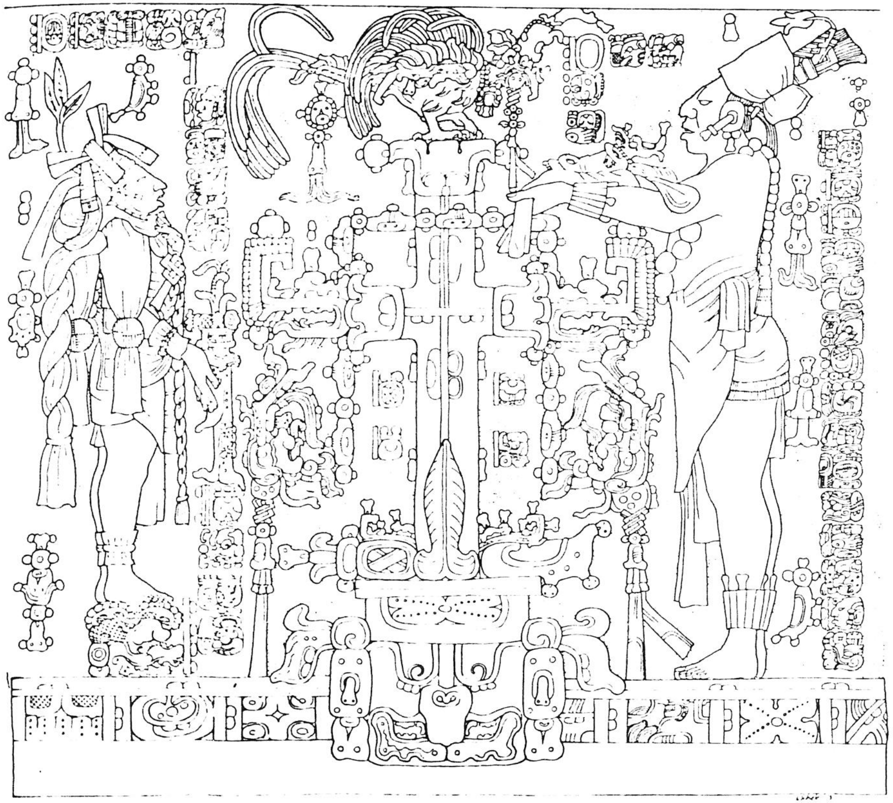
central serpent has a *kan* and a "completion" sign attached to his beaded nose, motifs diagnostic of representations of blood. The "sprouting serpents" of Pier C appear to be structural substitutes for the blood motif spilling from the top of the Quadripartite God. These associations suggest that the serpents are iconographically equal to blood and, by extension, to concepts involved with royal blood.

Each pier of House D of the Palace is framed by the symbols designated above as blood motifs. Pier C is framed on all four sides by repeating "completion" signs, Pier D by repeating *yax* signs, and Pier F by repeating elements similar to the "bone" motifs associated with blood.

The Quadripartite God holds a special iconographic place at Palenque on the Tablet of the Temple of the Cross and on the Sarcophagus lid in the Temple of the Inscriptions. The symbolism of the Cross Tablet has been discussed by Schele (1974, 1976), who notes that it (fig. 5.28) and the Sarcophagus lid (fig. 5.29) are partly cosmic in theme. The specific function of the Cross Tablet is based on the accession of "Chan-Bahlum," the ruler who commissioned the three major temples of the Cross Group. Two figures are shown on the tablet: the smaller figure, to the left, is Pacal; the larger figure, at right, is his son and successor, "Chan-Bahlum." For both figures—and for the viewer of the sculpture—the central focus is the "cross" itself, the horizontal bar of which has square-nosed serpents at the ends. Resting at the top of the cross is a mythical bird somewhat like the "serpent bird" encountered elsewhere with the Celestial Monster and skybands. Around the cross, in an inverted U shape behind the horizontal elements, passes a two-headed dragon whose body is made up of repeating *yax* signs. This cross-associated iconographic complex and the cross itself emerge from the top of the head of the Quadripartite God, whose large image faces outward at the bottom of the tablet.

The cross on the tablet can be equated iconographically to the Pier C beaded, or "jaded," serpents, who form an abbreviated version of the cross. Spinden (1913:45) noted the foliated aspect of the three Pier C serpents and the possible association of the tablet cross with a plant, specifically a ceiba tree. The serpents on Pier C form a three-branched image like that of the cross, and the same "jaded" serpents appear on the horizontal bar of the cross. The similar example from the Sarcophagus lid (fig. 5.29) shows that the central vertical "trunk" has a serpent head also on its end. The cross, or tree, on the Cross Tablet and on the Sarcophagus lid are complex, extended versions of the Pier C "serpent plant." The tree image on the Cross Tablet, like the Pier C example, may function as a structural substitute for the blood image seen on the sanctuary panel of this temple. The meaning of the two images appears to be closely related.

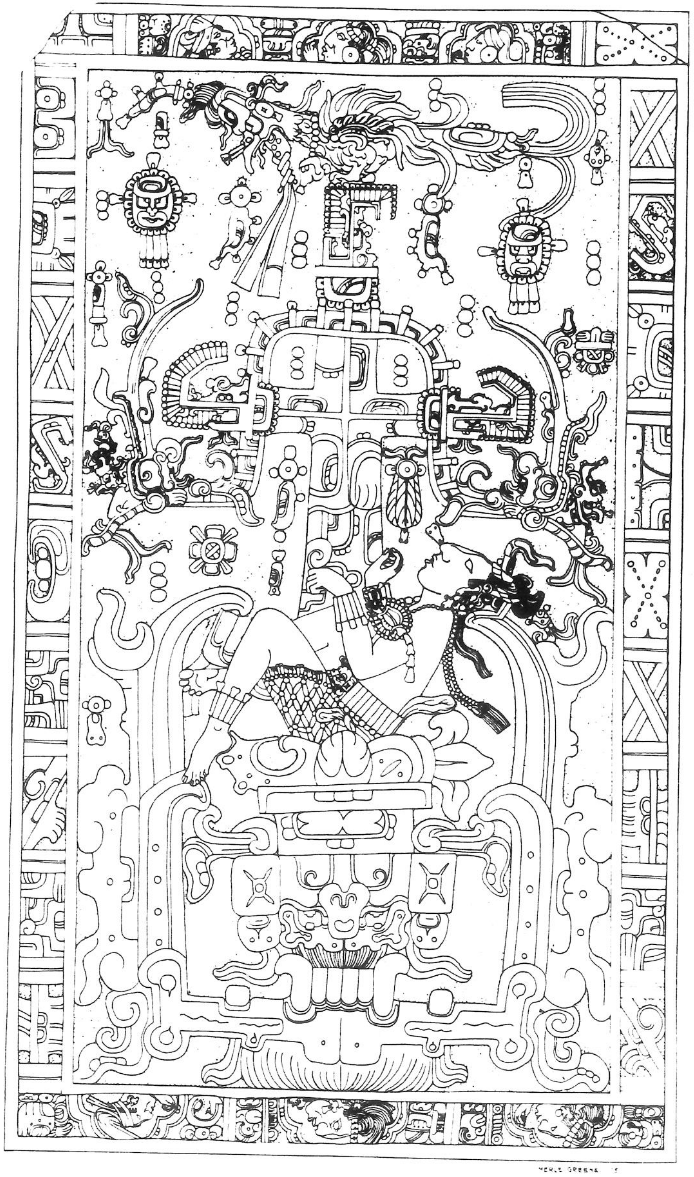
The hieroglyphic text of the Cross Tablet deals with the mythical and historical dynasty of Palenque up to "Chan-Bahlum's" ancestor of the same name, and it documents his right to occupy the office of ruler. The iconography seems to play a similar role, text and image complementing one another. Although the cross is not a straight-



5.28 Palenque, The Tablet of the Temple of the Cross. (Drawing by Linda Schele.)

forward representation of blood, the image is an iconographic statement of the concepts and qualities of the dynastic bloodline. While the imagery is cosmic, the emphasis is on the role of blood and ancestry in that cosmology. Like the text, it provides a semantic background for the event shown, the transfer of office (and the sacred attributes of that office) from Pacal to his son. The same theme can be found in the other two tablets of the Cross Group (Schele 1974).

On the Sarcophagus lid of the ruler Pacal, in the Temple of the Inscriptions, the Quadripartite God is again shown with a large tree rising from its head. Moreover, the image of Pacal appears to be resting on the god in the same relative position as the tree, which is surmounted by the mythical bird; a two-headed dragon wraps around the tree in the manner of the "*yax* serpent" of the Cross Tablet. Schele (1976) believes that the



5.29 Palenque, the Sarcophagus lid, Temple of the Inscriptions. (Drawing by Merle Greene Robertson.)

relationship of the Quadripartite God to the Sun (implied by the *kin* in the head) is relevant, for the lid sculpture appears to depict Pacal's descent into the Underworld with the setting Sun. According to Schele's interpretation, the Underworld is depicted as the open skeletal jaws into which Pacal is presumably falling.

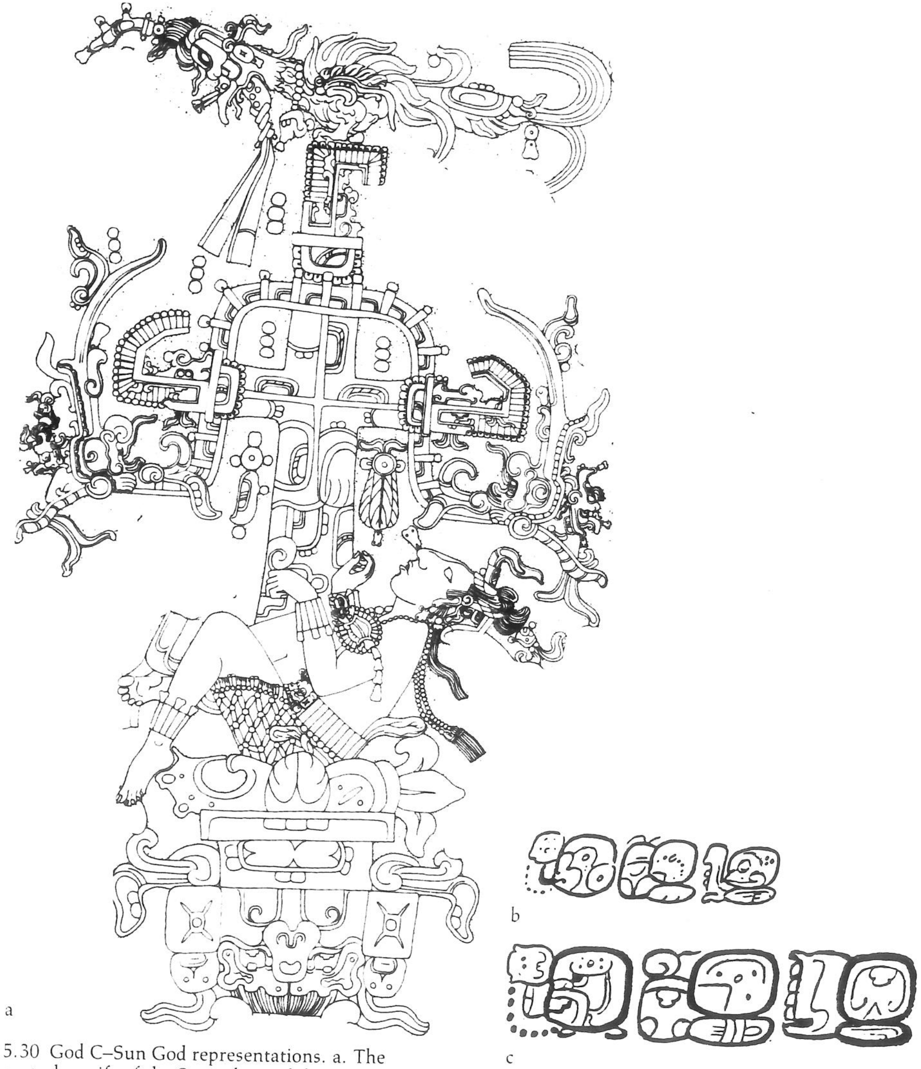
Pacal is shown in the place of the "blood tree," for, in death, he has assumed his position in the sacred dynastic ancestry of Palenque. The image on the Tablet of the Cross, with its apparent general meaning(s), has become personified as Pacal. The God K forehead flare, present in the brow of Pacal on the lid, is also suggestive. The "completion" and shell (*yax*) signs in the background might function as they did in the House D pier borders. The dynastic theme, demonstrated by the text around the lid (Lounsbury 1974a) and the ancestral figures shown on the sides of the Sarcophagus (see Schele n.d.a and this volume), places Pacal among his ancestors.

The forehead of the Quadripartite God with the "Sun" sign has an unusual shape, resembling a low bowl. Justeson (n.d.) has identified a component of the glyph for 'east' that is identical to the forehead of the Quadripartite God as a bowl (T546). He bases this identification on visual evidence and on the linguistic relationship between the reconstructed words for east and bowl. Representations of bowls are common in bloodletting scenes, where they often hold instruments for the rite or serve possibly as containers for blood. The images shown coming from the top of this "bowl" on the Quadripartite God may be equivalents to blood.

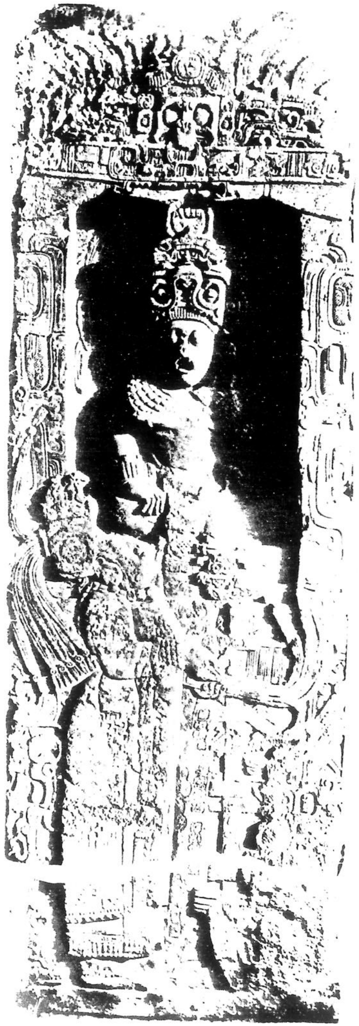
How does the apparent solar aspect of the Quadripartite God relate to its clear associations with blood symbolism? The Sun connection of the Quadripartite God seems clear enough, but it must be a specialized aspect of the Sun, since the god is not known as a general Sun deity. In many cases, the Quadripartite God is directly associated with blood and ancestor iconography. Its specialized function as an aspect of the Sun would involve concepts that relate the Sun to the blood right of kings.

Further solar relationships might be derived from the presence of the "God C–Sun God" face on the shaft of the tree on the Palenque Sarcophagus lid (fig. 5.30a). Physically, this enigmatic deity resembles the conventional Sun God, but, to my knowledge, he is never shown as a hieroglyphic substitute for the Sun God. While there are certain iconographic circumstances in which a general "Sun" label would seem appropriate, I have not seen convincing evidence for such an identification. There is, however, evidence to associate the deity directly with blood.

In at least one epigraphic context, the God C–Sun God being appears on the shaft of what might be called the "blood tree" as a direct substitute for God C, the personification of blood. One text (fig. 5.30b) shows God C prefixed by the "blood group" (as it almost always is). A second text (fig. 5.30c) shows God C replaced by this "God C–Sun God" character prefixed by the "blood-group" element. This is the most revealing example of the association between the God C–Sun God and the true God C, for here they seem to be virtual equivalents. The God C–Sun God cannot be thought of as a



5.30 God C–Sun God representations. a. The central motifs of the Sarcophagus lid, Temple of the Inscriptions, Palenque. (After drawing by Merle Greene Robertson.) b. God C with "blood-group" prefix. (Drawing by David Stuart.) c. God C replaced by "God C–Sun God." (Drawing by David Stuart.)



5.31 Piedras Negras Stela 14. (Photograph by Teobert Maler.)

"variant" of God C in all cases, however, because it appears in a wide range of contexts different from those of God C.

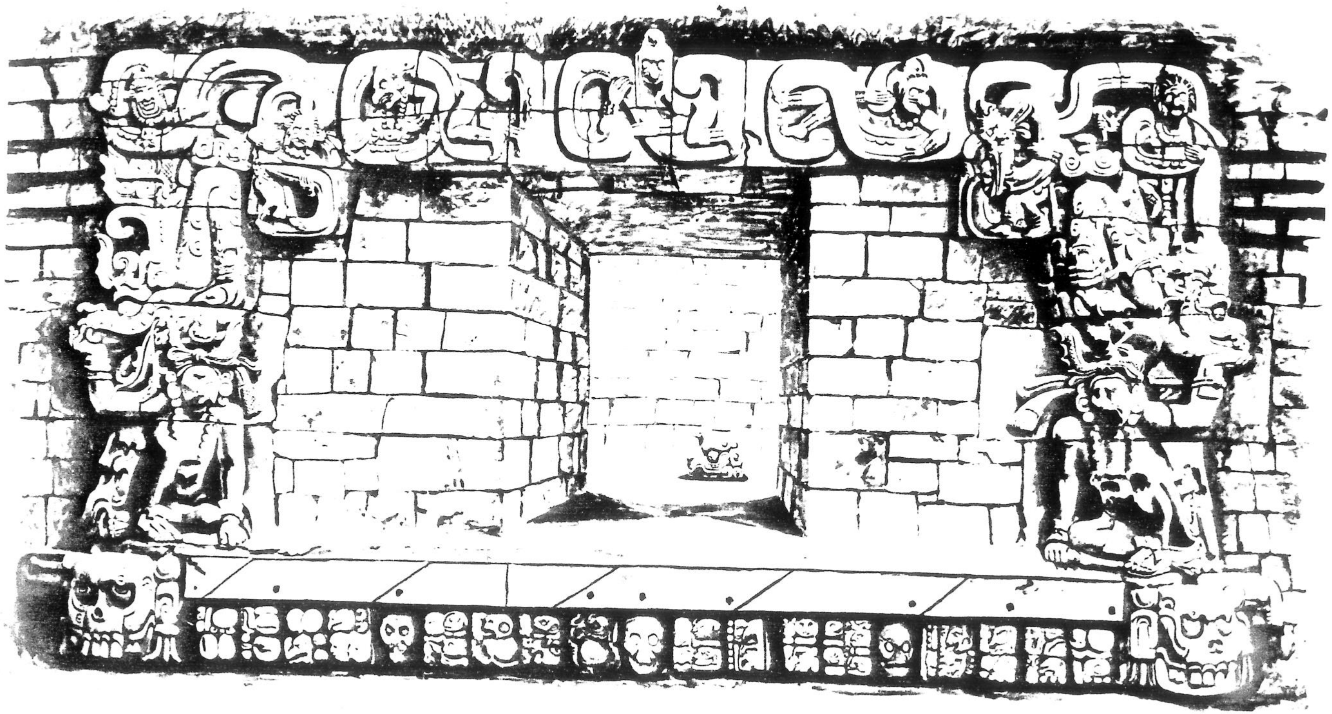
One context of the "God C–Sun God" that reflects a connection with blood appears on Piedras Negras Stela 14 (fig. 5.31), one of the "ascension" monuments of that site. The ruler is seated in a niche, as is customary; below him stands a female figure offering him instruments of auto-sacrifice. The niche is flanked by outward-facing "God C–Sun" deities. The presence of this god is based upon the blood association, for, on the other "ascension" monuments at the site, the skyband—the body of the Celestial Monster, in those cases—occupies the same position.

The Ruler in the Mouth of a Cosmic Beast

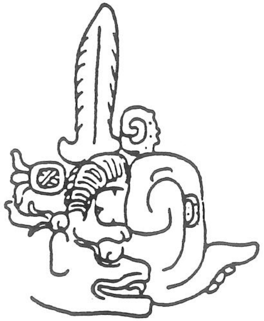
Another important iconographic example that relates these serpents to blood symbolism is found in the architectural sculpture of Copan Temple 22, a building long known to be of unusual significance because of both its location in the main acropolis and the abundant sculptures that adorned it. The principal surviving sculpture complex is found inside the structure, where it frames a doorway leading to an inner chamber (fig. 5.32, *top*). The dominant image of the sculpture is a Celestial Monster. At the sides of the wide doorway, the monster is held by seated figures, perhaps the Bacabs or the Pauahtuns, probably the former. The riser of a step below bears a lengthy, and as yet little understood, hieroglyphic text. The inscription is flanked by two skulls.

Some characteristics of this Celestial Monster make it highly unusual. The creature has two heads. The Quadripartite God, usually shown as an inverted head attached to the tail of the monster, is shown upright and connected to the body in the way that the front head is. A blood motif (fig. 5.32, *bottom*) emerges from the mouth of the Quadripartite God. The body of the Celestial Monster, which runs across the top of the doorway, is made up of seven S shapes, each entwined with a small figure. This is precisely the symbol set used on the monuments of Ucanal, Jimbal, and Ixlu. The Temple 22 S shapes contain crosshatching and dot motifs. The body of this Celestial Monster appears to be made of blood and beings who are depicted in intimate relation to the blood—all this instead of the more common skyband. Like the Paddlers and the warrior figures at Jimbal and Ixlu, the figures in the blood symbols of the Temple 22 sculpture might be thought of as ancestral deities. This example from Copan is the most explicit in showing the integration of blood—and ancestry—with a general picture of the Maya cosmos. The Piedras Negras "ascension" monuments hint at such a situation, but Temple 22 combines the imagery of the Terminal Classic monuments with that of Piedras Negras to reinforce the point.

The Temple 22 doorway seems much like the House E doorway at Palenque. Both are framed by an image of a Celestial Monster, and both are located in private ceremonial space. It is easy to imagine the respective rulers of Copan and Palenque standing under the Celestial Monster, perhaps as they performed bloodletting acts to small,



5.32 *Top*: Copan, façade of Temple 22. (After Maudslay 1889–1902, vol. 1:pl. 12.) *Bottom*: Detail of Temple 22 façade. (Drawing by David Stuart.)

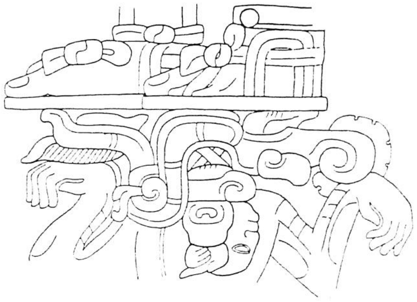


elite audiences. Their presence in this position places them in the same cosmic situation as the "niche" figures of Piedras Negras who perform auto-sacrifice. At Copan, the ruler takes his place also beneath the S-shaped blood images on the Celestial Monster that form the universe. It was apparently the king's blood, offered in such a ceremony, that defined the Maya cosmos. The sculpture of Temple 22, House E, and the Terminal Classic Group (and countless others, no doubt) was meant to put in a mythical and cosmic context the act performed by the ruler as a duty of his office.

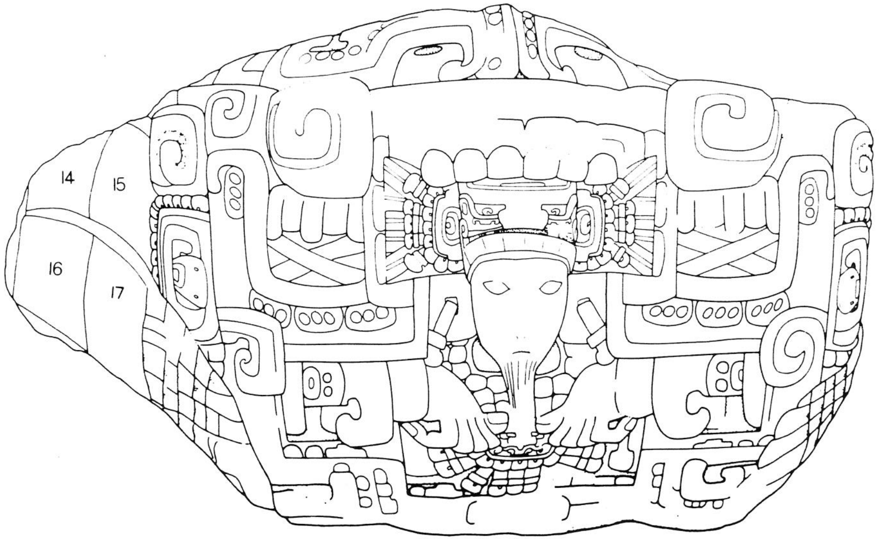
Quirigua Zoomorph B (fig. 5.33) is a rounded sculpture of a Celestial Monster. The main head has the distinctive crossed bands in its eyes, and the head of the Quadripartite God appears at the back of the sculpture. The monument is covered by an elaborate full-figure hieroglyphic text that records the Period Ending 9.17.10.0.0 12 Ahau 8 Pax and its celebration by the ruler "Two-legged Sky" (Kelley 1962). To my knowledge, Zoomorph B is the only Quirigua monument dedicated to this important date.

Presumably, the human portrait looking from the open mouth of the front monster is "Two-legged Sky." The position in relation to the monster that the portrait occupies is the same as that occupied by blood in many other representations. This monument is another example of the structural substitution of blood for another object—in this case, the ruler himself. The ruler who celebrates the Period Ending, probably by means of a bloodletting rite, is shown as blood emerging from the mouth of the Celestial Monster. By extension, he is a part of a world made of royal blood, and thus he takes a place equal to that of his ancestors. This monument does not show a "scattering" rite, but I believe that the message is the same as that of scenes that do.

A variation on this imagery of rulers' portraits with the Celestial Monster can be extended back to stela format at an early time. Yaxha Stela 6 (fig. 5.34) probably dates to just before 9.5.0.0.0 (Proskouriakoff 1950:107–108), if not earlier. A ruler stands on a complex assemblage of images that forms the lower register of the sculpture. Its main component is an apparent Celestial Monster, with only the front part of the body



5.34 Yaxha, detail of Stela 6. (Drawing by David Stuart.)



5.33 Quirigua Zoomorph B. (Drawing by Andrea Stone.)

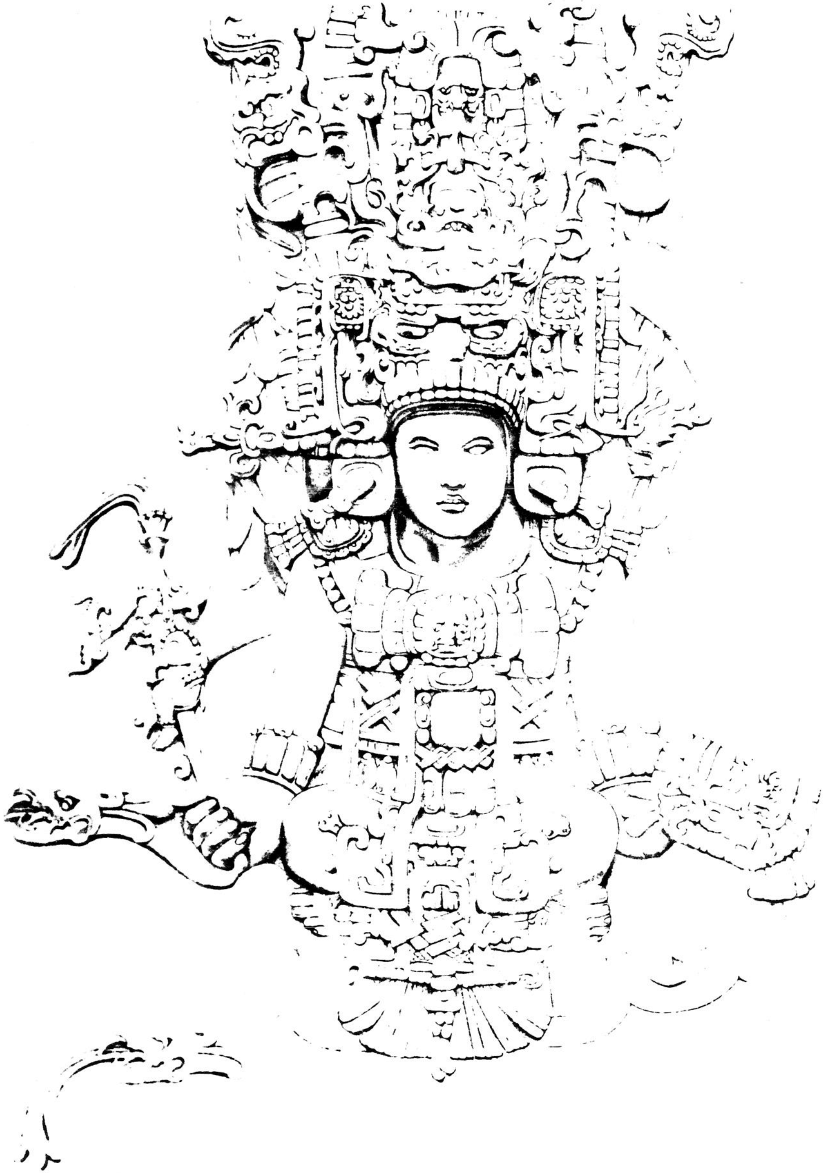
surviving. He is shown upright, with his back to the viewer and his arms raised to flank his head, which points directly upward; his mouth is open to form a horizontal plane between this register and the image above. The ruler stands on this horizontal plane, as though within the mouth of the monster. The use of the images on this stela is different from that on the Quirigua zoomorph, but the relationship between them and the message seems to be the same. The ruler stands in the place of the blood images that normally flow from the Celestial Monster.

The presence of figures, particularly rulers, inside the mouths of cosmic beasts is common at Quirigua. Zoomorph P (fig. 5.35) shows the ruler sitting in the mouth of a creature and holding a God K scepter and a shield. I believe that this sculpture is almost identical in meaning to Zoomorph B. The main head of the beast has crossed bands in its eyes, showing this part to be the same as on Zoomorph B. There are, however, some differences from the conventional Celestial Monster. The body of the animal is that of the "Cauac Monster," possibly with earth associations. Also, the back head is not that of the Quadripartite God.

The complex matter of variation in some of the symbolism connected with blood cannot yet be fully explained. On the basis of available data, I believe that the *cauac* shows another aspect of the Celestial Monster, which may not be "celestial" at all. The symbolism of Zoomorph P may be based on the earth rather than on the sky. Even though such representations differ in details, the cosmic meaning of each allows for general interpretation. This variation is most apparent in "ceremonial bars."

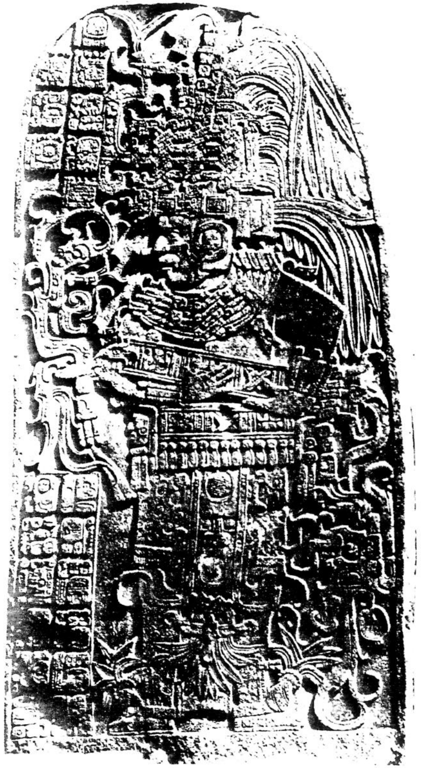
Seibal Stela 10 is one of four stelae erected by the local ruler on 10.1.0.0.0 5 Ahau 3 Kayab (fig. 5.36). Each of these four monuments bears a different scene; the set shows the many ways in which Period Endings were celebrated, or, at least, depicted. Stela 10 shows the ruler standing in profile, holding across the middle of his body a bar that is a long skyband with an elaborate mythical serpent head at its left end. From the right end of the bar emerges a tail with clear serpent markings; it ends in the somewhat stylized head of the Quadripartite God. This bar recalls the Celestial Monster, although the main (left) head has little direct resemblance to the common version. The verb glyph of the text is the bloodletting reference to "scattering."

A straightforward connection can be made between this "scattering" reference in the text and the presence of the serpent image held in the ruler's arms. The Celestial Monster forms a major component of the symbolism of blood. Blood icons can be shown flowing from the mouth of such a serpent (sometimes replaced by portraits), and, as at Copan, they can form the body of the serpent itself. The serpent and blood images are all but synonymous, so there is evidence to indicate that the major cosmic element of the Celestial Monster and of other serpents that might have cosmic meanings is, indeed, blood. The holding of the serpent image on Stela 10 is still another means of expressing the ruler's auto-sacrifice. Not only can the ruler be shown under or in the mouth of the "blood serpent," he can also hold the "blood serpent" in his



5.35 Figure on the front of Quirigua Zoomorph P. (Drawing by Annie Hunter, in Maudslay 1889–1902, vol. 2:pl. 62.)

arms. Stela 10 appears to record a bloodletting by the ruler, and it shows him "holding the blood" rather than throwing it from his hands.



5.36 Seibal Stela 10. (Photograph by Teobert Maler.)

'HOLDING THE BLOOD'

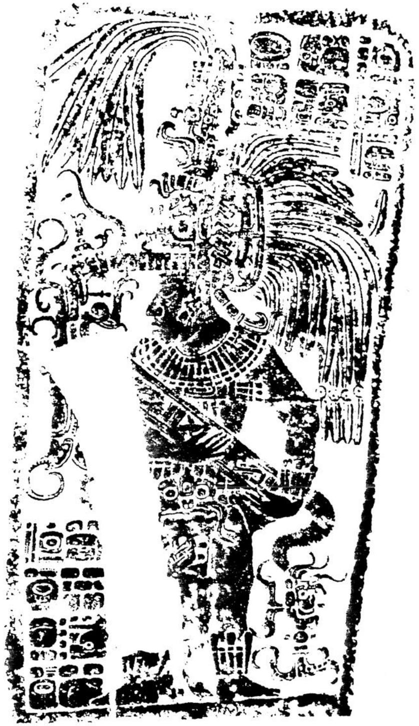
'Holding the blood' happens to be a rather direct translation of a hieroglyphic verb on Seibal Stela 9 (fig. 5.37), a monument erected on the same date as Stela 10. The scene on Stela 9 is similar to that on Stela 10: the standing ruler holds in his arms a ceremonial bar, or "blood serpent." The head of this bar, although damaged, looks like that on Stela 10, but the serpent is not the one on Stela 10. The most striking difference is found in the tail, where the head of a long-nosed god, with what may be a God C face on his forehead, is attached. This serpent is enclosed within a skyband.

The text of this stela opens with the Calendar Round, followed by three glyphs (B1–B2) that are known from other instances to be sacrifice references (Schele 1982:94). The glyph at C2 has the third person possessive *u* ('his,' 'hers,' 'its') and a hand with upturned thumb (T670) "holding" the glyph of God C. Earlier in this paper, we encountered this hand and God C as a substitute for "fish-in-hand" in glyph G1 of the "Nine Lords of the Night." Literally, the glyph can be read 'his holding the blood.' I am certain that it refers here to the holding of the "blood-serpent" bar by the ruler.

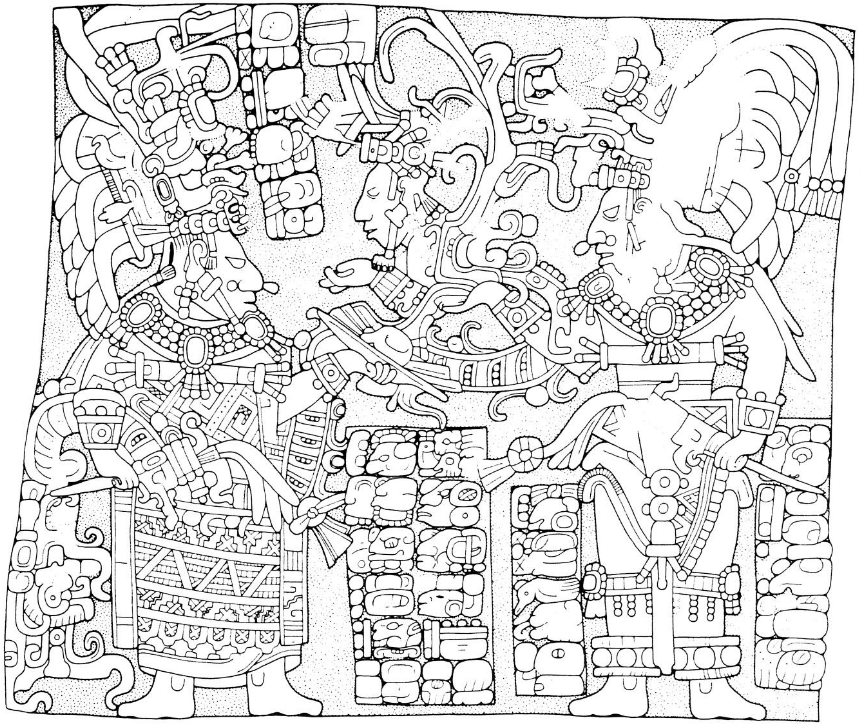
The bloodletting association of this serpent can be traced to Lintels 13 (fig. 5.38) and 14 (fig. 5.39) of Yaxchilan. The theme of these sculptures is auto-sacrifice, as is seen in their texts (note the "fish-in-hand" at D2 on Lintel 14) and in the bloodletters held by the standing figures. The serpent image on each sculpture passes through the arms of the female figure at the left and turns back to face her. From the mouth of the serpent head emerges the head and arms of a human figure, in the manner seen on Lintel 15 (fig. 5.10). The female holds up to this figure a bowl of bloodletting paraphernalia. This serpent is, I think, the same as that on Seibal Stela 9, or very close to it. There is a God C face on the head at the tail of the serpent; this is particularly clear on Lintel 14.

The event depicted on Lintel 13 appears to be the birth of "Shield-Jaguar" II. Because the two standing figures are named clearly as Lady "Skull-Zero" and "Bird-Jaguar" II, the parents of "Shield-Jaguar," I think that "Shield-Jaguar" must be the figure emerging from the serpent—he is being born from the serpent that passes by his mother. This interpretation would go along with the birth metaphor at Dos Pilas. This sculpture can be interpreted as documenting the birth of "Shield-Jaguar" by showing his emergence as a member of the bloodline. The child in the serpent's mouth may be seen as a substitution for blood. Lintel 14, although visually identical to Lintel 13, has no specific birth reference in its text. Since "birth" is a bloodletting metaphor, one might not expect it to be repeated.

The serpent of Lintels 13 and 14 shows similarities to the Celestial Monster, not

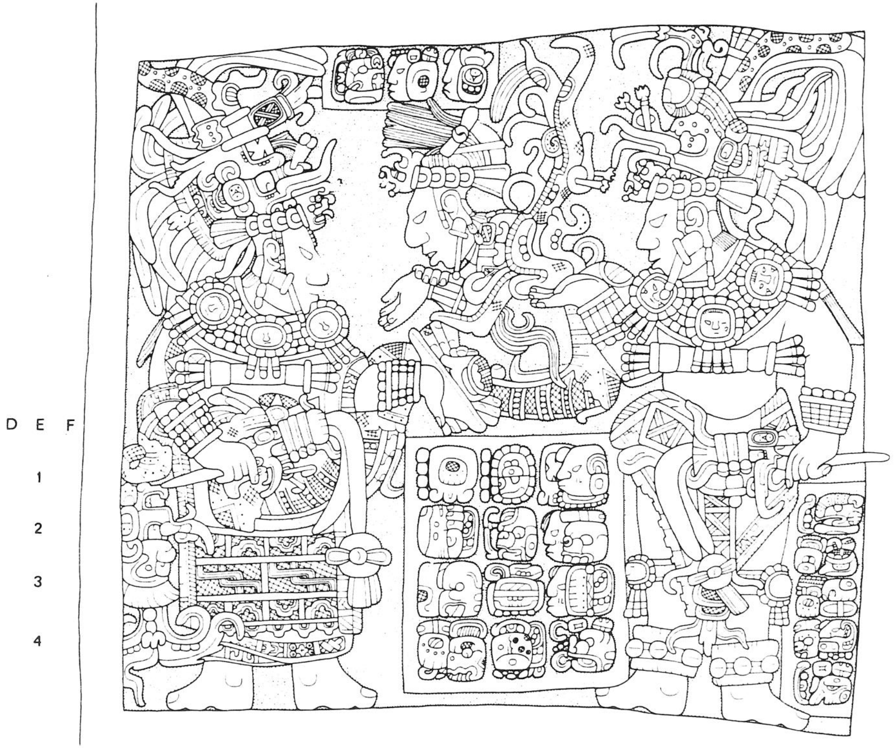


5.37 Seibal Stela 9. (Rubbing by Merle Greene Robertson.)



5.38 Yaxchilan Lintel 13. (After I. Graham and von Euw 1977, vol. 3:35. Peabody Museum Press. Copyright 1977 by the President and Fellows of Harvard College.)

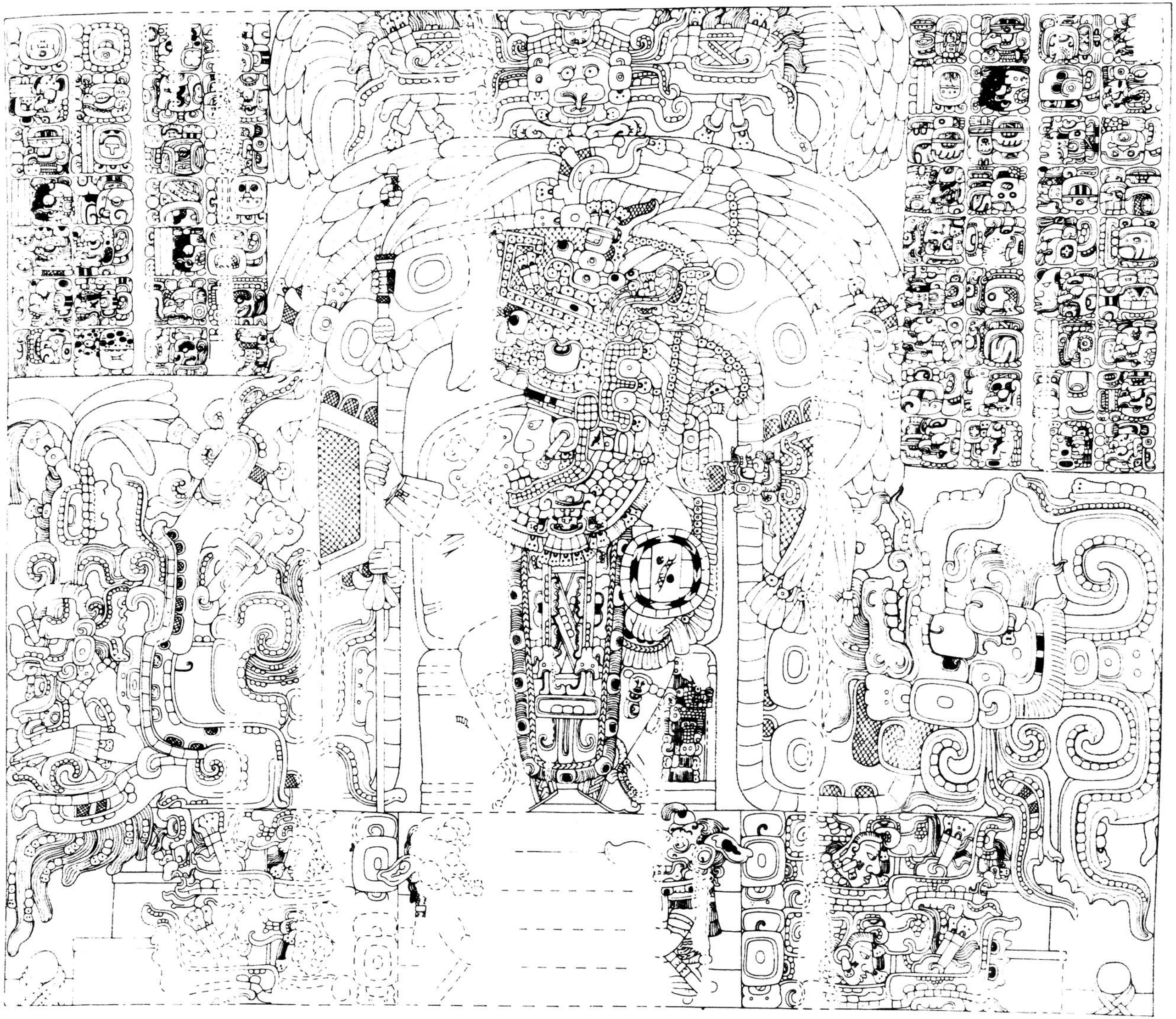
only at Seibal, where it functions as a ceremonial bar, but also at Tikal on Lintel 3 of Temple IV (fig. 5.40), a sculpture with a general cosmic theme. "Ruler B" of Tikal (Jones 1977) is shown seated on a throne atop a low platform reached by steps. This scene recalls the "ascension" motif at Piedras Negras, although the Tikal sculpture does not commemorate an accession. The ruler occupies the center of the sculpture; around him is an impressive representation of the serpent described at Seibal and Yaxchilan. The head of the long-nosed god with God C in his forehead appears at the tail of the serpent (right). From this rear head emerges a dotted scroll, which is probably blood. Where the serpent body arches over the ruler's portrait is perched a mythical bird, certainly a variant of the "serpent bird" associated with Celestial Monsters at Palenque and Piedras Negras. This bird occupies the same space above the Tikal ruler that



5.39 Yaxchilan Lintel 14. (After I. Graham and von Euw 1977, vol. 3:37. Peabody Museum Press. Copyright 1977 by the President and Fellows of Harvard College.)

the "serpent bird" occupies above the niche on Piedras Negras monuments. The body of the serpent continues to the left, where it ends at the "natural" head. A jawless long-nosed god emerges from its open mouth.

On this lintel, the serpent functions as does the Celestial Monster. As at Palenque, Piedras Negras, and Copan, the serpent frames a portrait of the ruler. At Tikal, there is no skyband, but, like the Temple 22 sculpture at Copan (fig. 5.32), the serpent has blood associations. The God C head at the tail and the probable blood image emerging from it are suggestive, as are the *yax* signs on the body of the serpent. On the basis of these and other associations, I think that "Ruler B" is shown here surrounded by a serpent whose cosmic identity revolves around royal blood.



5.40 Tikal, Lintel 3 of Temple IV. (Drawing by W. R. Coe, in Jones and Satterthwaite 1982:fig. 74. The University Museum, University of Pennsylvania.)

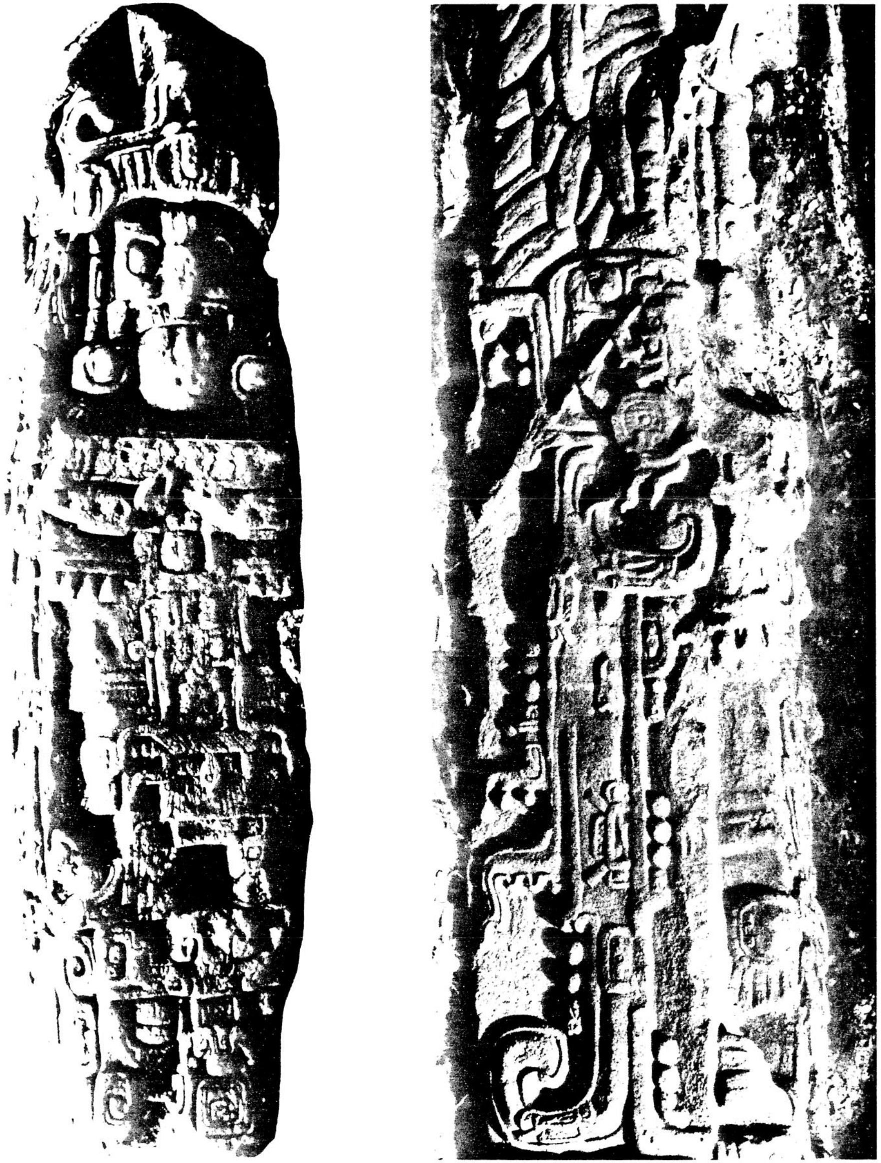
At Seibal, this serpent is held by the ruler within a skyband and is referred to directly by the "blood" God C glyph. At Yaxchilan, its image is tied directly into scenes of bloodletting that revolve partly around the birth metaphor. At Tikal, the serpent seems to work as a cosmic entity with clear blood associations present. It is a true "blood serpent," as is the Celestial Monster to a great degree, and other serpents as well.

Quirigua Stela H is like most other monuments of that site in that it depicts in full-front view a ruler holding a serpent bar across his chest (fig. 5.41, *left*). The front of Stela H is weathered, especially in details of the serpent bar. It is difficult to say whether serpent heads were ever present at the ends of the bar, but, on one side of the monument, there is an emerging God K figure (fig. 5.41, *right*), which could possibly come from a serpent mouth now effaced. This God K holds a long spear and a shield. Behind the small figure, some scroll images fall to form a stream that I interpret as blood representation. This is one of the more explicit examples of the motif, for it has the "bead" and "bone" elements at its sides, as well as three *kan* and three "completion" signs at alternating locations within the stream. The blood stream falls from the end of the bar to the feet of the ruler. God K as a warrior coming out of a serpent(?) bar recalls the warrior figures as floaters on the Terminal Classic monuments. This bar is like those at Seibal, where the blood equivalence was explicit. The Stela H ruler is again "holding the blood."

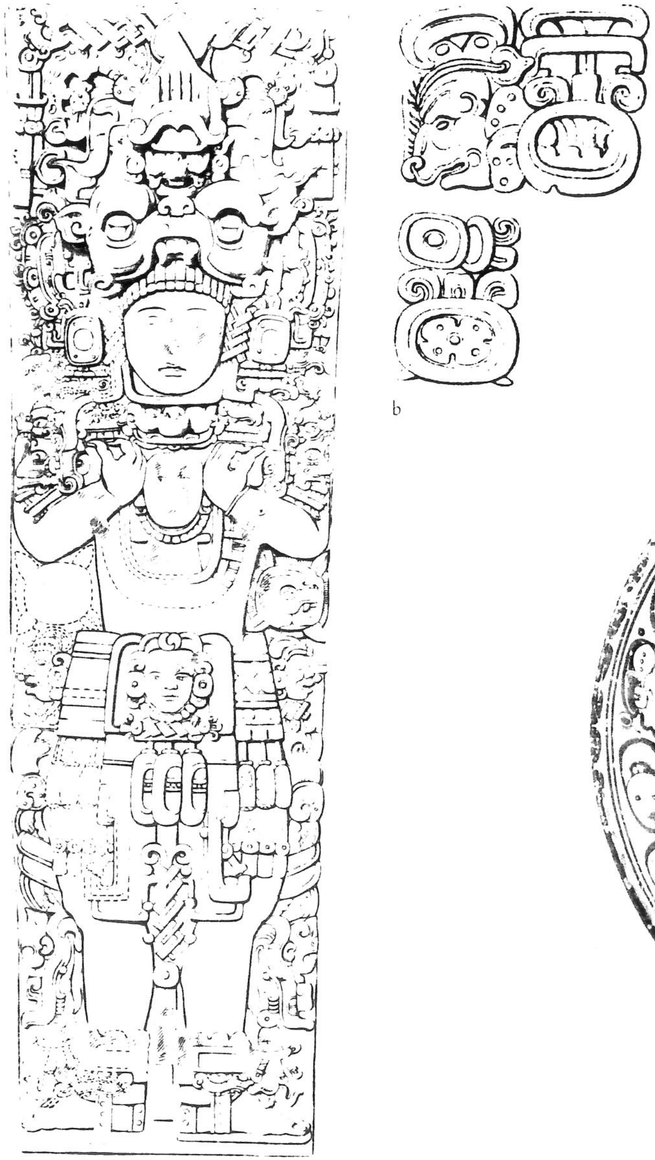
Copan Stela 2 (fig. 5.42a) shows a ruler holding a double-headed serpent bar with a more flexible look than most. The serpent heads on the ends are identical, and there is a head of a supernatural in each of the two open mouths. We have already seen blood falling from the mouths of serpents, and I suggest that figures shown in the same place are substitutions for these blood images. On Copan Stela 2, I believe that the supernatural heads in the mouths of the serpent bar are substitutes for blood. The heads are those of the Paddler Gods. On a number of examples, these Paddlers replace blood images, and Copan Stela 2 appears to present a logical variation on the theme. Rather than showing the Paddlers floating above the ruler or falling from his hands, this monument depicts the ruler holding the Paddlers, who are named in the text (fig. 5.42b).

It would appear that many, if not most, of the heads that emerge from the mouths of serpent bars probably represent portraits of mythical or historical ancestors of the ruler. On the stelae of Seibal, Quirigua, Copan, and elsewhere, the ruler holds his blood and his ancestral line (often with the cosmic skyband)—a basic concept behind royal auto-sacrifice.

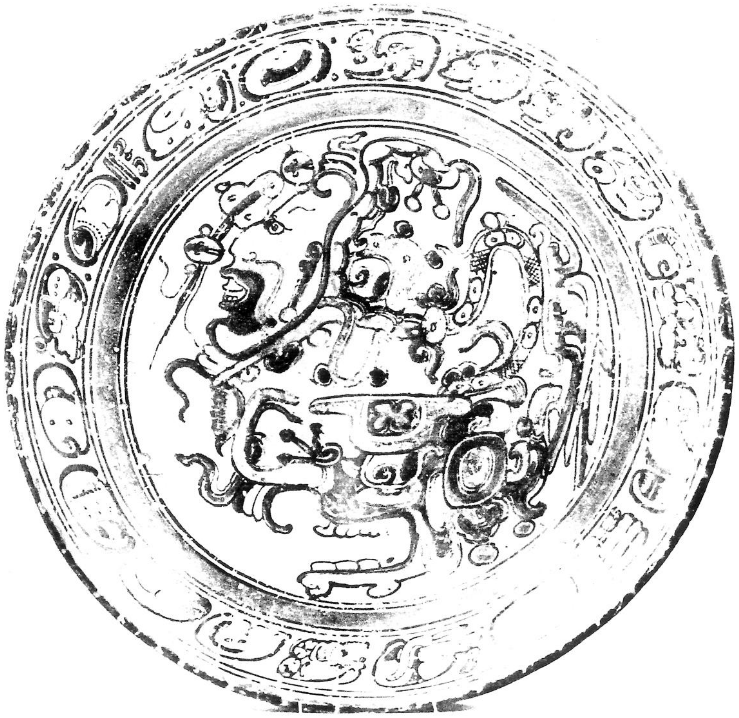
To emphasize the notion that serpent images in Maya art are to a large degree synonymous with blood, I wish to discuss a polychrome plate (fig. 5.43), on the floor of which is a complex scene of the Quadripartite God in profile. From the top of the "*kin*-bowl" forehead emerges an image of a serpent much like those seen as ceremonial bars. A human head is shown in the open mouth of the serpent. I think that this ser-



5.41 Quirigua Stela H. *Left:* Front, with ruler holding serpent bar. (Photograph by S. G. Morley.) *Right:* Detail of side. (After Maudslay 1889–1902, II:pl. 45.)



5.42 Copan Stela 2. (Drawings by Annie Hunter, in Maudslay 1889–1902, vol. 1:pl. 101.)



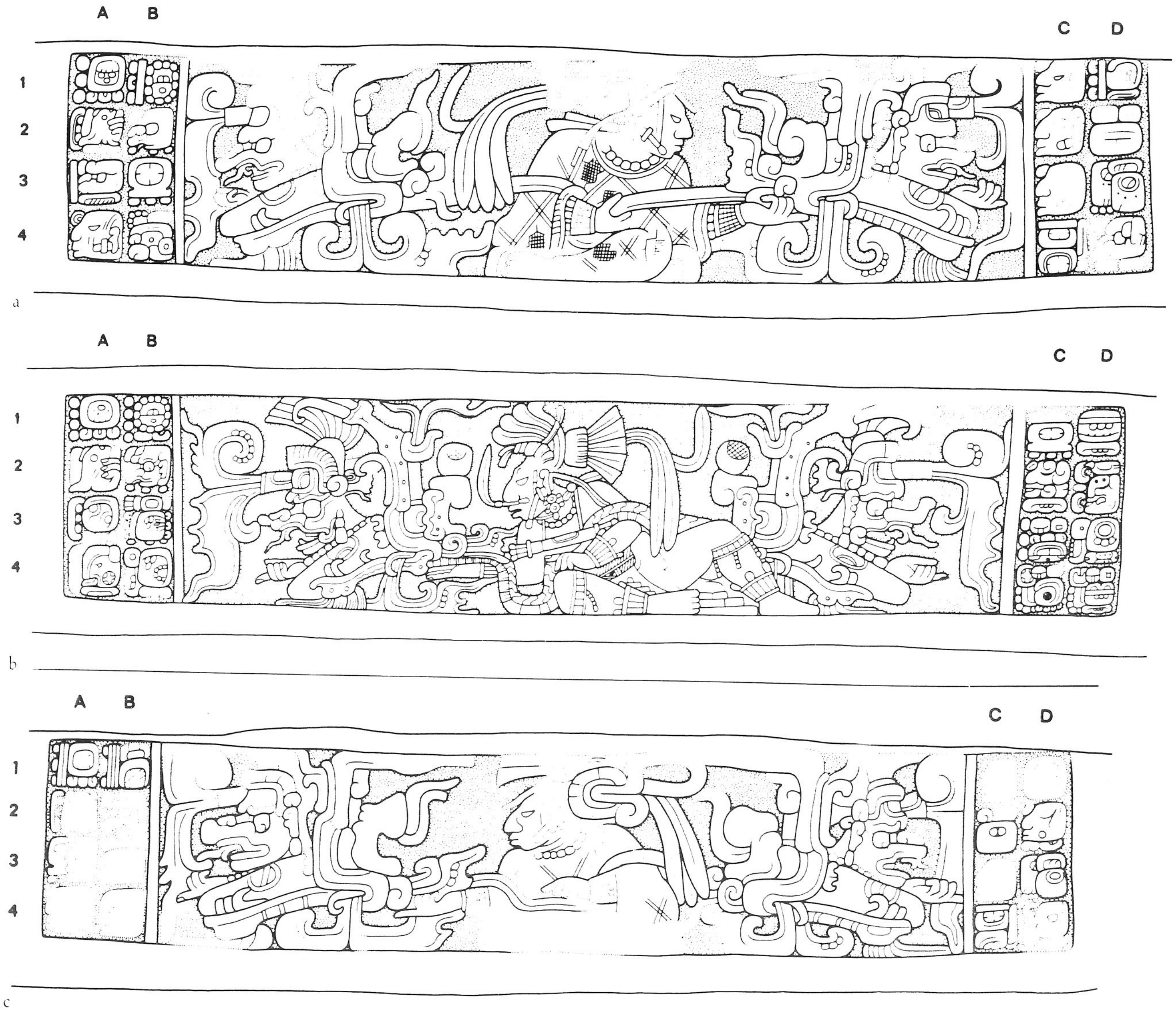
5.43 Polychrome plate with Quadripartite God. (Photograph copyright Justin Kerr, 1980.)

pent is a semantic substitution for the blood icon pouring from the Quadripartite God on the West Sanctuary Panel of the Temple of the Cross (fig. 5.23).

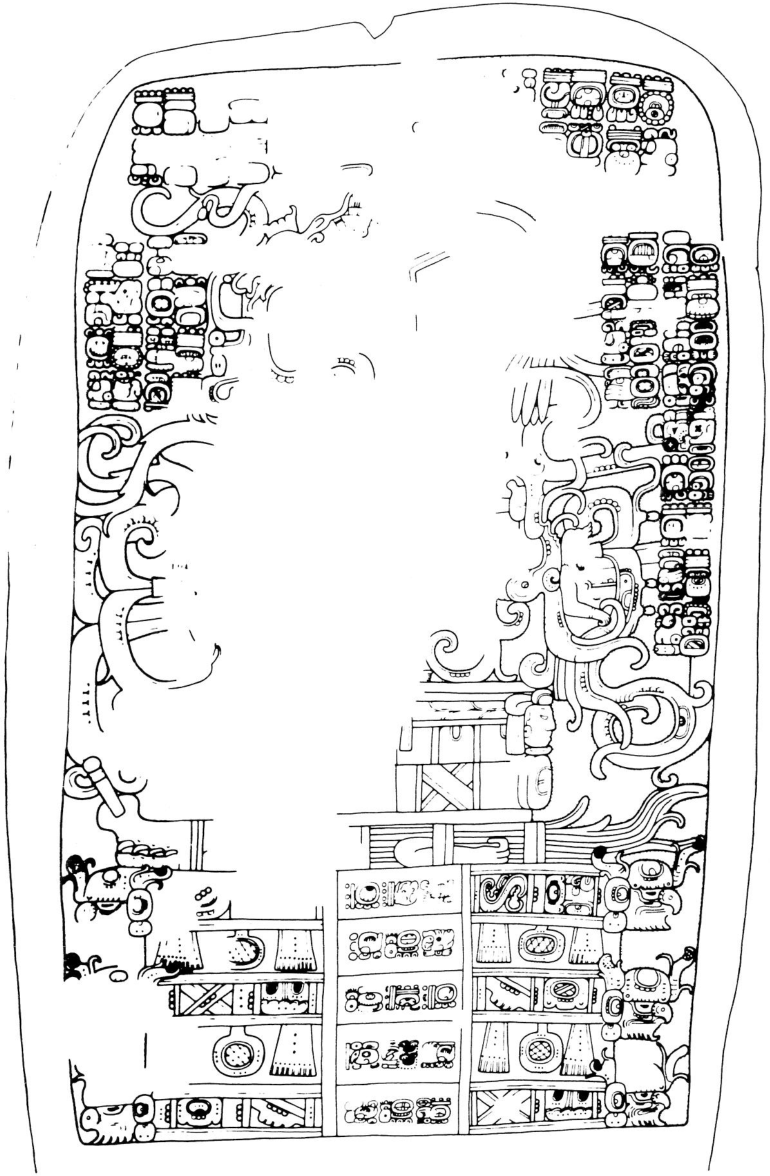
The event recorded on Yaxchilan Lintel 25 (fig. 5.11), which commemorates the accession of "Shield-Jaguar," is bloodletting. The woman who kneels beneath the serpent image holds a bowl containing the equipment for bloodletting, and it looks as though these have been used by "Shield-Jaguar" (note the stingray spine and the dark "blood" spots). This representation of the king just after he had let his own blood is not naturalistic; the image of "Shield-Jaguar" emerging from the maw of a serpent was, to the Maya, expressive of the definition of kingship. The ruler comes from the serpent mouth just as blood does, and he is wrapped in the S shape of his own blood. On the day of his accession, "Shield-Jaguar" expresses the definition of his new office: upon inauguration, the king literally occupies the blood of his ancestors. In the real world, this is expressed through bloodletting, but in art it can be expressed in the rich symbolism of this sculpture. On Lintel 25, the blood definition seems to be qualified by the symbolism of war. Perhaps "Shield-Jaguar" is expressing his specific new role as a "warrior king" and its relationship to his special blood. Lintel 25 may be one of the clearest documents explaining the meaning of bloodletting in relation to Maya political power.

God K also plays a major role in the complex of blood iconography, for he is the deity most commonly seen emerging from the mouths of serpent bars, as on Yaxchilan Lintels 38, 39, and 40 (fig. 5.44). These sculptures show "Bird-Jaguar" II (Lintel 39) and two of his wives (Lintels 38 and 40). Each figure holds a two-headed serpent bar, and that held by "Bird-Jaguar" appears to be a skeletal version of the other two, possibly another variation on the two-headed-serpent theme, for the fleshed serpents are much like the one on Copan Stela 2 (fig. 5.42).

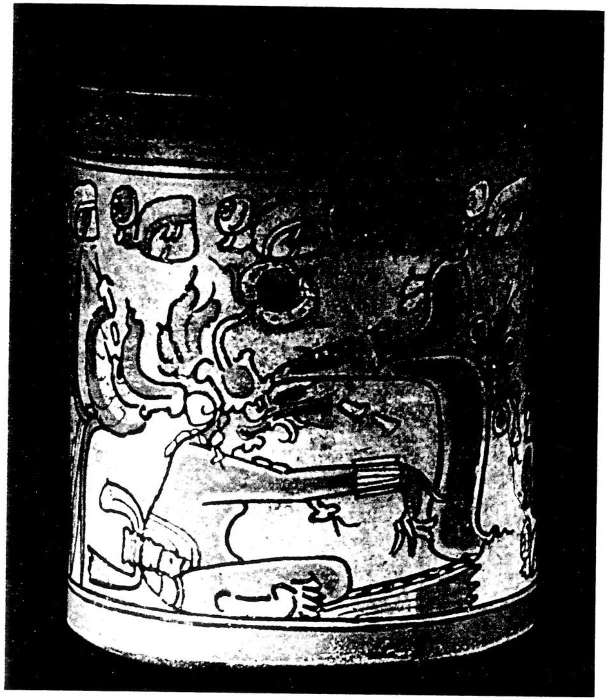
The verb recorded in the text of each lintel (at A2) is "fish-in-hand." The bloodletting of these figures is indicated by the holding of the "blood serpent." Moreover, extending the suggestion about figures that emerge from serpent mouths, God K would here be a substitute for blood. One of the diagnostic traits of God K is the "smoke" that emerges from his forehead. This led M. D. Coe (1973:16) to equate God K with the Central Mexican deity Tezcatlipoca, or "Smoking Mirror," an identification that has been generally accepted. In a number of cases, however, this forehead motif seems to merge with the blood icon. The image emitted from God K's forehead on Yaxchilan Lintels 38, 39, and 40 is strikingly similar to blood icons already discussed, particularly those on Quirigua Stela H (fig. 5.41). In addition, the small God K figures emerging from the partially effaced serpent bar on Naranjo Stela 32 (fig. 5.45) show this similarity (and, as on Quirigua Stela H, a blood motif emerges from the serpent mouth behind the God K figures). The forehead scrolls of God K on Stela 32 are iconically identical to this motif. The most convincing example of God K in association with blood motifs is found on a polychrome vase (fig. 5.46). The motif appears on the vessel


A
B
C
D
1
2
3
4
a
A
B
C
D
1
2
3
4
b
A
B
C
D
1
2
3
4
c

5.44 Yaxchilan lintels showing two-headed serpent bars and associated motifs. a. Lintel 38. b. Lintel 39. c. Lintel 40. (After I. Graham 1979, vol. 3:85, 87, 89. Peabody Museum Press. Copyright 1979 by the President and Fellows of Harvard College.)



5.45 Naranjo Stela 32. (After I. Graham 1978, vol. 2:86.)



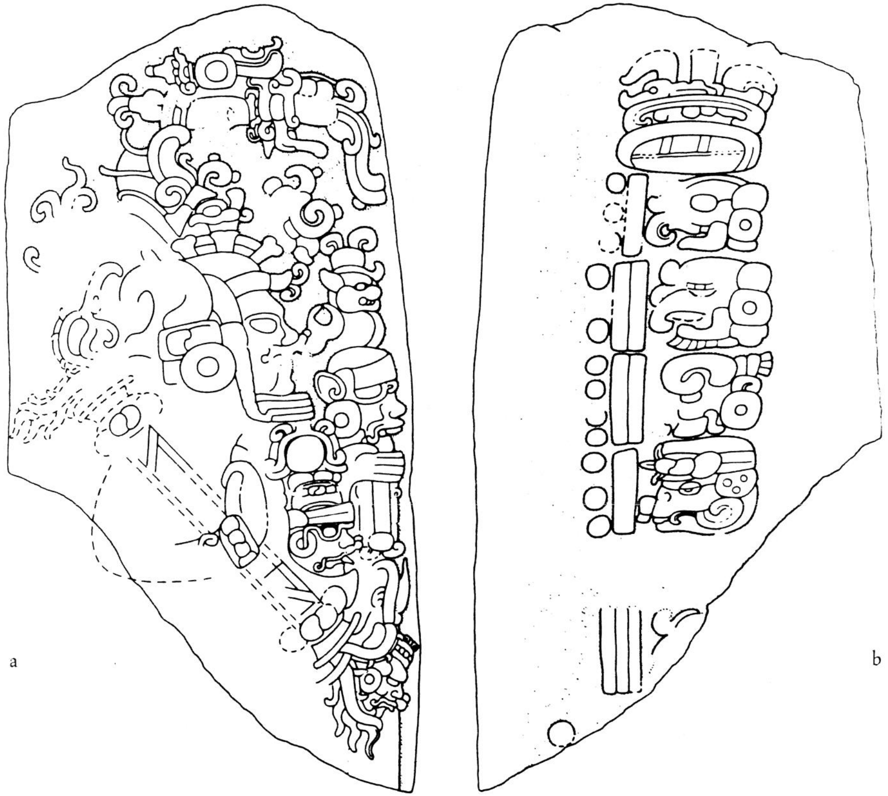
5.46 Polychrome vase with God K in association with blood motifs. (After Robicsek 1978:pl. 236.)

in color—red. "Completion" signs are attached to it. It seems that the God K forehead scroll can sometimes be blood.

Many have noted that God K functions as a symbol of rulership and, extending this concept by his possible identification with the Yucatec Ah Bolon Tzacab (Seler 1902–1923, vol. 1:376–377), have supposed that he is related to the concept of royal lineages. This notion would fit with the observation that blood is a major motif associated with him.

CONCLUSIONS

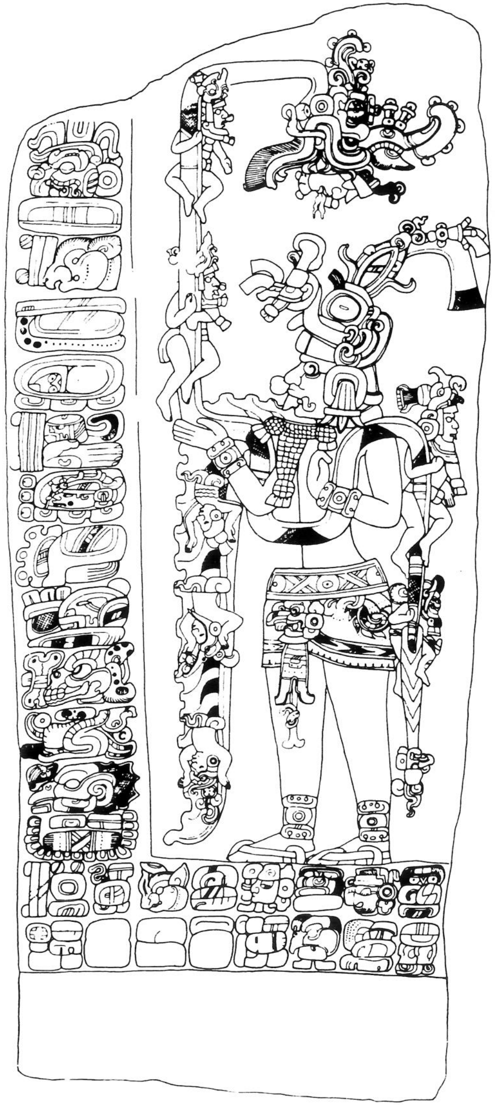
The iconography that can be identified as part of the "blood complex" is abundant on some of the earliest documents of the Maya Lowlands. Tikal Stela 29 (fig. 5.47), the



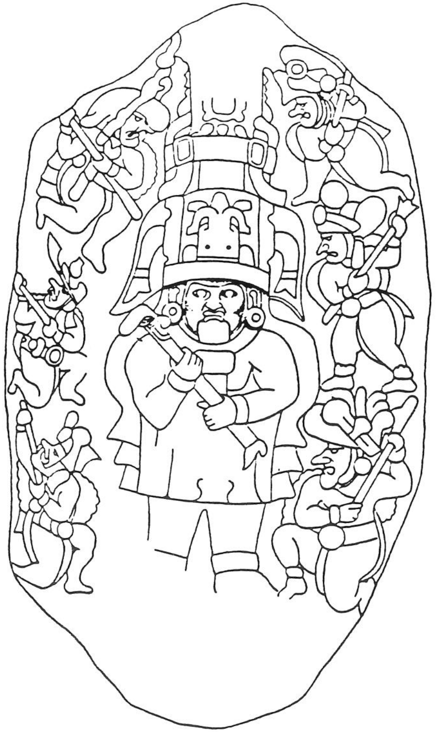
5.47 Tikal Stela 29. a. Front. b. Back. (Drawing by W. R. Coe, in Jones and Satterthwaite 1982:fig. 49. The University Museum, University of Pennsylvania.)

earliest dated monument recovered archaeologically, shows a ruler standing and holding a blood-serpent bar on one arm. Above him is a down-looking face, surely that of an ancestor, which occupies a space comparable to that occupied by the figures in "ancestor cartouches" at Yaxchilan and by the floaters-in-blood (also ancestors) at Ucanal, Jimbal, and Ixlu. This space above rulers' portraits seems often to have been reserved for ancestor images, probably in direct association with the bloodletting ceremonies recorded and depicted on all these sculptures. On Stela 29, bloodletting by the ruler is implied by the blood serpent he holds.

The "Hauberg" Stela (fig. 5.48) is without doubt earlier than Tikal Stela 29. The main figure is presumably a ruler wearing a deity mask; he holds a serpent that is a



5.48 The Hauberg Stela. (Drawing by Linda Schele.)



5.49 La Venta Stela 2, Tabasco. (After Joralemon 1971:fig. 2.)

variation on the blood serpents seen above. Attached to the serpent body are small figures, perhaps comparable to the small ancestor figures that form the blood body of the Copan Temple 22 Celestial Monster (fig. 5.32). The serpent on the Hauberg Stela winds up and over the ruler's portrait, and from its open jaws emerges a down-looking head, no doubt with the same function as the head on Stela 29. The putative ancestor images above the ruler merge with the image of ancestors coming from the mouths of blood serpents.

I am reasonably sure that the bloodletting theme of such art can be traced back to the monumental art of the Olmec. Stela 2 of La Venta, Tabasco (fig. 5.49), displays a standing figure, probably a ruler, holding a staff in a manner reminiscent of later Maya scenes. It cannot be said that this staff is related to the Maya ceremonial bar—or to any other Maya object—but it is possible that its basic function may have been similar. The six miniature figures that float in the space surrounding the main figure are striking. They relate the sculpture, I believe, to a bloodletting theme. Each figure holds an object like that held by the protagonist. The similarity between this scene and those on monuments such as the Ixlu and Jimbal stelae should be obvious, and the placement of supernatural ancestor figures as miniature floaters is well documented from the earliest sculptures identifiable as Maya. The small figures on La Venta Stela 2 could well be precursors of those ancestor images. Their depiction would imply bloodletting as the main act on this Olmec monument, an interpretation reinforced by the known existence of bloodletting instruments among the Olmec. The type of iconography encountered in Classic Maya monumental sculpture appears to have been present in Mesoamerica in Late Preclassic times.

The items referred to in this discussion of iconography suggest that much of the Maya symbol system conveyed the basic theme of bloodletting. The idea behind that theme lay in an emphasis on bloodline and ancestry. Indeed, at this point, I have no reluctance in stating that bloodletting and ancestor imagery, together with a cosmological framework, were the principal forces behind the vast majority of ancient Maya public art from its earliest times to its demise in the Terminal Classic.

6

MICHAEL D. COE

Ideology of the Maya Tomb

The cult of the dead was fundamental to Classic Maya civilization. The Maya seem to have focused on the tomb and the Underworld more than did other Mesoamerican cultures. Given this emphasis, it is ironic that so few Maya tombs of importance have been excavated, let alone published, by professional archaeologists. This situation has resulted largely from the reluctance of Maya scholars to recognize that the primary function of Classic temple-pyramids was to house the remains of Maya rulers (M. D. Coe 1956). For instance, in his exhaustive study of Maya funerary customs, published in 1968, the late Alberto Ruz Lhuillier realized that the cult of the dead had resulted in the expending of a tremendous amount of labor on tombs, but he obstinately refused to believe that pyramids and temples could have formed part of this cult—and this in spite of the fact that he was the discoverer of the great tomb in the Temple of the Inscriptions at Palenque! His prejudices, unfortunately, became gospel in his adopted country.

In contrast, an army of commercial pothunters has been ravaging hundreds, perhaps thousands, of tombs in the Maya Lowlands in search of pictorial Maya vases and other burial furniture. Unlike the archaeologists, *they* know exactly where to find what they are looking for; the great Maya tombs are almost always placed deep within pyramidal substructures and can be reached by trenching and tunneling. The results of such informal excavations can be seen in desecrated pyramids all over the Maya area.

Thus, in coming to grips with the cult of death among the Classic Maya, we are forced to rely on a handful of published excavations, and on the information provided by thousands of painted and carved vases without context. It is virtually certain that the original context of these pictorial ceramics was entirely funerary, and that the iconographic message conveyed by them was primarily directed toward the afterlife and the Underworld (M. D. Coe 1973, 1978).

STRATIFICATION AND COMPLEXITY

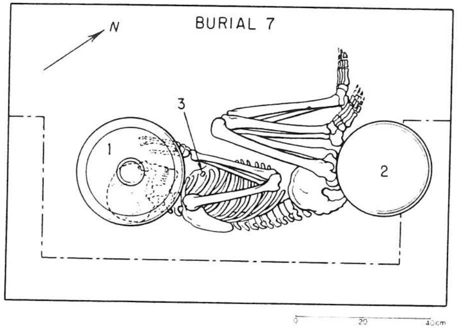
Mesoamerican societies in Classic times were highly stratified, and both epigraphy and "dirt" archaeology show that the Lowland Maya were no exceptions. In reported burials, there is a clear progression from commoner to noble.

As an example of an interment belonging to the lower end of the social scale, one could point to Burial 7 from Altar de Sacrificios, dating to the Early Classic period (fig. 6.1a; A. L. Smith 1972:fig. 42c). This was a subfloor burial, and the corpse had been flexed in a fetal posture. There is every reason to believe that this was a poor individual, since the only offerings were two plain, inverted bowls, one placed over the head and the other near the pelvis. It was a common practice at Altar de Sacrificios and other Classic Maya sites to place shallow bowls upside down over the head in subfloor, commoner burials. These bowls were usually "killed" by a hole punched or drilled in the bottom. What was the meaning of this custom? I would venture that the clay bowl represented the underside of the surface of the earth in a Mesoamerican cosmological scheme of thirteen heavens, the earth's surface, and nine underworlds. The head of the corpse was, therefore, next to the top of the uppermost underworld. As for the "kill hole," the Aztec viewed the heart as the seat of understanding, the liver as the seat of the emotions, and the head as the entrance and exit of the soul. In my view, the bowl was pierced to release the soul of the defunct.

Let us now turn to a burial which surely was that of a wealthy commoner, the Late Classic Burial 88 at the same site (fig. 6.1b; A. L. Smith 1972:fig. 45a). Here, the corpse had been covered with an entire layer of earthenware vessels, no fewer than seventeen, in fact. But even more significant than the increase in the number of bowls was an offering of jade, placed near the mouth. We will deal with this subject later.

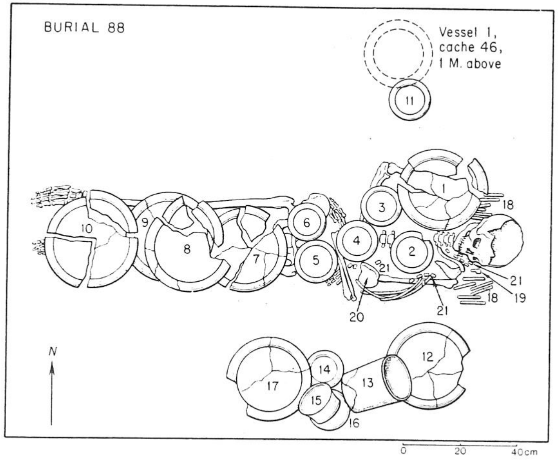
The Late Classic Burial 128 at Altar de Sacrificios (fig. 6.1c; A. L. Smith 1972:fig. 49a and 266–268) is an excellent example of an elite burial in one of the smaller Maya cities. This was, in effect, a tomb housed in a special pyramid or structure that had been erected to contain it. Such mounds or pyramids are mentioned in several important ethnohistorical sources. Fuentes y Guzmán (1932, vol. 1:264–267; Miles 1957:749) gave a detailed account of the burial of a lord in the southern Pokom area. After the body had been bathed and purified with decoctions of aromatic herbs and flowers, it was dressed and decorated as in life, then placed on a platform. There was a vigil of two days, during which the corpse was attended by a large guard of lords and principal men. Burial took place at night, with a great procession of the sons of the lords bearing rich funerary offerings. The priests placed the dead lord in the tomb structure, which was a large olla, along with offerings of mantles, mats, gold, silver, food, and charcoal; afterward, a flagstone was placed on the olla and a large mound raised over the tomb.

While Altar de Sacrificios Burial 128 is of a form different from the Pokom burials, the richness of its offerings tells us that this deceased also was a member of the ruling class. The corpse was extended on its back, surrounded by pottery bowls and vases, all probably containing food and drink. Jade offerings were placed over the mouth and neck, and a large plate was inverted over the face. In this case, however, the bowl was not plain but pictorial, with a hieroglyphic text; both scene and text contained Underworld information for the benefit of the deceased. Stingray spines were placed

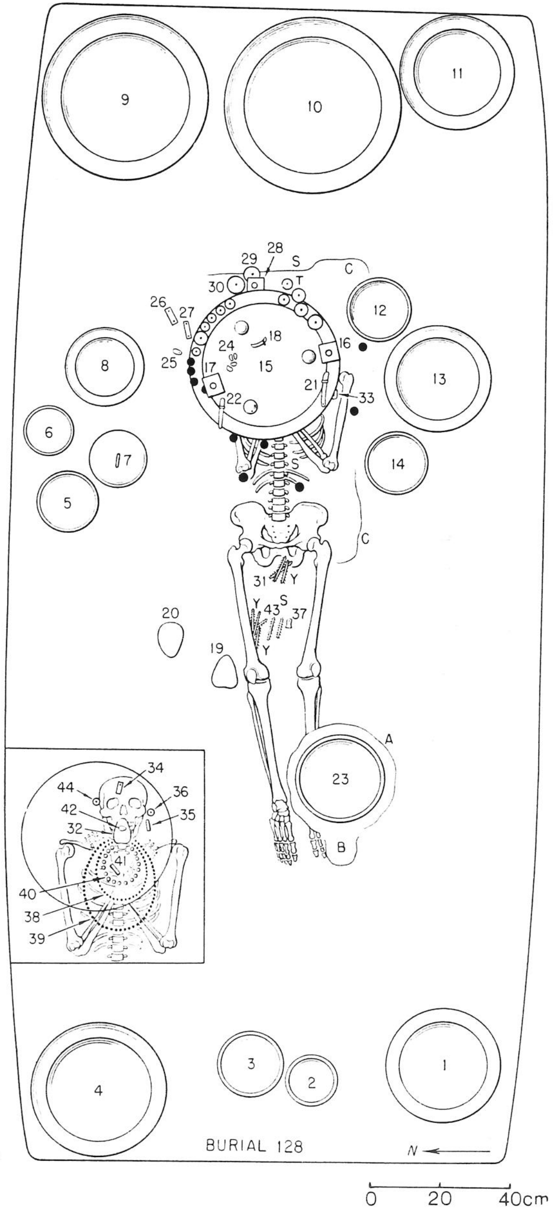

N
BURIAL 7
1
2
3
0
20
40cm

a

6.1 Three Classic Maya burials from Altar de Sacrificios, Guatemala. (After A. L. Smith 1972:figs. 42c, 45a, 49a. Peabody Museum Press. Copyright 1972 by the President and Fellows of Harvard College.) a. Burial 7, an Early Classic flexed burial of low status. *Key*: 1 and 2. pottery bowls; 3. disk stone bead. b. Burial 88, a Late Classic interment of middle status. *Key*: 1–17. pottery bowls; 18. pottery beads; 19 and 20. shell; 21. thirty-five beads of jadeite or other greenstone, one *adorno* of jadeite or other greenstone, one bone pin and one worked bone object, one obsidian bladelet, and one painted perishable object, possibly of wood. c. Burial 128, a Late Classic crypt burial of high status. This interment contained polychrome and carved pictorial ceramics with glyphic texts. *Key*: 1–15. pottery jars, bowls, and plates; 16–18, 21–22, and 28. pottery earplugs; 19. unworked shell and stingray spine; 20. pottery mask; 23. slate-and-pyrite mosaic mirror; 24, 25, and 33. mother-of-pearl; 26, 27, 29, 30, 34, and 37. pottery bars, disks, pendant, and beads; 31 and 43. twenty-five stingray spines (note position in the region of the groin); 32. fragments of *Spondylus*; 35, 36, 38, 41, 42, and 44. jadeite or greenstone beads and *adornos*; 39 and 40. shell beads; S. obsidian flakes (note position of one near head, as though for ear perforation).


BURIAL 88
Vessel 1, cache 46, 1 M. above
11
10
9
8
7
6
5
4
3
2
1
18
21
19
20
21
18
17
14
15
16
13
12
N
0
20
40cm

b


9
10
11
12
13
14
8
6
7
5
29
28
S
C
30
T
26
27
24
18
15
16
25
17
21
33
22
S
C
31
Y
Y
43
S
37
Y
20
19
23
A
B
34
44
36
42
35
32
41
40
38
39
4
3
2
1
BURIAL 128
N
0
20
40cm

c

between the thighs, and a mirror over the left foot and ankle. We shall soon see the meaning of these objects in the mental world of the Classic Maya, as well as the significance of the great quantity of flint sealing the top of the tomb.

I shall now examine the various classes of objects that were necessary accompaniments to elite burials among the Classic Maya.

Jade

The funerary function of jade was mentioned by Mesoamerica's earliest chroniclers. Sahagún (1950–63, bk. 3:fig. 15) pictures the placing of a jade bead in the mouth of a corpse among the Aztec. Bishop Landa (1941:129–130) has an even more interesting reference for the late pre-Conquest Maya.

> Once dead, they place them in a shroud, filling their mouths with ground maize, which is their food and drink which they call *koyem,* and with it they placed some of the stones which they use for money, so that they should not be without something to eat in the other life.

Las Casas (1909:629–631; Miles 1957:749–750) informs us that, on the expiration of a northern Pokom Maya lord, a jade was placed at the mouth, "in which they believe that they took the spirit, and on expiring, they very lightly rubbed his face with it."

Two possible symbolic meanings can be induced from these data. The first is that jade = food = maize; in other words, the piece of jade or jade bead was a symbolic ear of maize for consumption in the other world. Such an equation of jade (particularly jade celts) with maize ears is well documented for the Middle Formative Olmec and is clearly an old and well-established tradition in Mesoamerica. The mouth, however, is not only a consumer of food, it is also the ingress and egress of human breath. Las Casas's testimony suggests that the jade bead was equated with breath, which was thought to be the spirit. Thus, among the Maya there might have been two "souls": one was the breath, and the other lay in the head, entering and exiting at the fontanel.

In any case, the inclusion of jade in elite burials and tombs was a function not only of its rarity but also of its value as a symbol of life itself.

Ritual Bloodletters

Auto-sacrifice or ritual bloodletting was an elite activity described by ethnohistoric sources for many parts of Mesoamerica. This practice has been analyzed in detail by Joralemon (1974) for the Classic Maya, among whom the preferred instrument was the stingray spine; Landa (1941:191) describes the use of these instruments by the late pre-Conquest Maya of Yucatan.

> The Indians used these little saws [i.e., stingray spines] in cutting their flesh in the sacrifices of the devil and it was the duty of the priest to keep them, and so they had many of them. They are very nice, for they are of white bone and curiously formed in the shape of a saw so sharp and fine that it cuts like a knife.

Numerous depictions on pictorial ceramics and stone reliefs show that these spines, as well as bone ''awls'' used for the same purpose, were, in fact, deified: the handle of each perforator took the form of a long-lipped god head with a stack of knots topped by quetzal plumes as a headdress. Such instruments were used by male rulers, and by deities, to draw blood from the penis, as first pointed out by Thompson (1961), although noble women may also have used them to pierce their tongues so that a cord might be drawn through the hole.

The ideology of ritual bloodletting in the Maya area and in the rest of Mesoamerica was probably complex. There is increasing evidence that among the Classic Maya elite ''blood'' had much the same double meaning that it does for us today, with a secondary but fairly clear-cut association with the concept of royal lineage and descent. Linda Schele (personal communication) has suggested that the substance falling from royal hands in the ''hand-scattering rite'' may well have been blood, and David Stuart (this volume) proposes that the ''water affix'' of the Emblem Glyph might also be a line of blood, that is, lineage.

But there may have been an even deeper meaning for ritually shed blood, particularly blood from the penis, in ancient Mesoamerica. Among the Aztec, Quetzalcoatl was the main god of penance, sacrifice, and bloodletting. According to the *Manuscript of 1558* (León-Portilla 1963:107–109), at the beginning of the Fifth Sun, the gods gathered in Teotihuacan to see who should inhabit the earth. Quetzalcoatl was sent by them to Mictlan, the Land of the Dead, to search for the bones of man, so that man should be created once again. After finding the bones, Quetzalcoatl brought them to Tamoanchan, on the earth's surface, where female goddesses ground them up and put them in a pottery vessel. Quetzalcoatl and other male gods perforated their penises and bled over the bones, thus creating human beings anew. Bloodletting, therefore, equals creation and rebirth, the creation of life from death; some sources even have Quetzalcoatl as the son of Mictlantecuhtli—the very god of life springing from the god of death.

Joralemon, in his ground-breaking paper on ritual blood-sacrifice (1974), called attention to the extraordinary parallel between a scene on page 53 of the Borgia Codex and the Tablet of the Foliated Cross at Palenque. In the former, a maize ''tree'' rises from the body of the Death Goddess; to the left of the tree is Quetzalcoatl, perforating his penis, while on the right another god performs the same act. Their blood spurts forth and nourishes the tree. On the Foliated Cross Tablet, Chan-Bahlum and his deceased father, Pacal the Great, flank another maize tree, and Chan-Bahlum bears in his hand the deified perforator. It is clear that, although they are widely separated by time and space, the two scenes are identical: maize, the sustenance par excellence of human beings, is fertilized by the penis blood of gods and deified rulers.

Given the association of perforation with death and rebirth, it is no surprise that bloodletters are common grave furniture among the Classic Maya. To return to Burial 128 at Altar de Sacrificios (fig. 6.1c), a cluster of stingray spines had been placed between the thighs of this elite personage. This individual has been identified as a female, but the placing of penis perforators in the appropriate place would, in my opinion, make the identification dubious, to say the least. At best, the sexing of skeletal material has a large margin of error built into it, even more so when the bones are in poor condition, as in this case.

I believe that the list of perforators included as tomb furniture can be expanded beyond stingray spines, if one includes sharply pointed slivers of bone, which have been identified by archaeologists as "awls," and perhaps some of the better-made and longer obsidian blades. For instance, near the skull of Burial A41, which dates to the Tepeu 3 period at Uaxactun, lay a bone implement which was classified as an awl by its excavator (A. L. Smith 1950: fig. 131c), but which certainly could be a bloodletter. The early chronicler Motolinía, in describing the Great Feast in Tlaxcallan, states that specialists produced obsidian knives (i.e., blades), including "some lancets for bloodletting"; these were used by another specialist to make holes in the tongues of participating priests, through which they drew large numbers of sticks (Steck 1951: 129–130). Sharply pointed obsidian blades, whether occurring singly or in clusters, should be considered good candidates for bloodletters when found in graves.

I am not suggesting that corpses were actually perforated during funerary ceremonies, since blood would not flow; but the honored dead were expected to perform the same rituals in the afterlife that they had performed in this one. In particular, one or more stingray spines at or near the pelvic area imply that this was an elite male who would be drawing blood from his penis in Xibalba, the Maya Underworld.

Mirrors

The supreme importance of the mirror as the embodiment of Maya rulership is becoming increasingly apparent through epigraphic and iconographic studies (Schele and J. H. Miller 1983). Among the late pre-Conquest Yucatec, the ruler was the *u nen cab*, 'the mirror of the community.' Many Late Classic Maya painted and carved vases show the ruler gazing at his visage in an obsidian mirror held by a subordinate (M. D. Coe 1975: no. 12) or tilted on the floor before the throne. Here the ideological background is crystal clear: the mirror was the supreme symbol of the great deity of royal descent, known as the Dark Tezcatlipoca ('Smoking Mirror') to the Central Mexicans. Among the Aztec, this was the god of witchcraft, of the night sky, and of the warriors, as well as the great supernatural to whom Aztec rulers directed their prayers when they succeeded to office.

I have long theorized that this snake-footed deity, with a smoking mirror at his head and foot, was identical with the god known laconically to Mayanists as God K, and that both gods were derived from a Preclassic predecessor; this predecessor has been recognized by Mary Miller (personal communication) as the serpent-footed individual holding an axe depicted on Stela 3 at Izapa. God K is the so-called manikin-scepter figure, but he may appear held in the arms or lap of ancestral figures or peering from the jaws of the celestial serpent (the so-called ceremonial bar). In all cases, this is the god of royal descent among the Classic Maya. Infixed in God K's head is the *nen*, or 'mirror,' glyph, first identified by Jeffrey Miller—the glyph that is used in Maya art on the bodies of gods to identify them as divine. From this mirror protrudes a torch, cigar, or axe, with wisps of smoke curling out; the finding by Floyd Lounsbury (Schele and J. H. Miller 1983) that there is comparative linguistic evidence from Maya languages that the words for 'torch' and 'obsidian mirror' are homonyms suggests that the origin of the great god ''Smoking Mirror'' lies in the Maya area.

We should thus expect to find mirrors in important Maya tombs, and such is the case. Unlike those depicted on Maya ceramics, none of the excavated mirrors is of obsidian; all are polished, pyrite-mosaic plaques, which had been glued to a backing. In the Maya Highlands, they are common in tombs of the Esperanza Phase at Kaminaljuyu, where they have been labeled by the excavators (Kidder, Jennings, and Shook 1946:126–133) as ''pyrite-incrusted plaques''—thin, circular plaques of shale faced with pyrite mosaic. Seven of these, for example, were found on or near the corpse of the individual in Tomb A-III; in fact, mirrors were associated with all of these burials. The Early Classic Tomb 1 in Mound 2 at Nebaj (Smith and Kidder 1951:fig. 42) contained no fewer than forty mosaic mirrors!

Mirrors are not so frequent in Classic burials of the Maya Lowlands; they seem confined to the highest-status tombs, such as the so-called Sun God's Tomb (B–4/7) at Altun Ha (Pendergast 1969). The only burial with a mirror at Altar de Sacrificios was, as one would expect, Burial 128, where a large pyrite-mosaic mirror had been placed over the left leg of the deceased (fig. 6.1c). The most lavish burial ever found in the Peten, Burial 116, inside Temple I at Tikal, had three mirrors (Coggins 1975:456–548).

As the *u nen cab*, 'the mirror of the community,' a great Maya ruler or lord would naturally be accompanied by one or more mirrors on his way to the Land of the Dead; after all, he was God K, or Tezcatlipoca, 'Smoking Mirror.'

Books

We are all familiar with Landa's (1941:130) statement about the burial practices of the Yucatec Maya: ''They buried them inside or in the rear of their houses, casting into the grave with them some of their idols, and if he was a priest, some of their books." There is good archaeological evidence for books in Classic tombs of the Lowland Maya. Tragically, because of the high humidity of Maya tombs, only unreconstructable traces remain of these bark-paper codices; these are all we have of the thousands of books that must have been in existence during the Classic florescence. At the left shoulder of Burial A29, in a tomb of the Tzakol 3 period at Uaxactun, a codex had been placed, but, as usual, only stucco fragments were found; this must have been a male burial, for a stingray spine was positioned over the pelvic area (A. L. Smith 1950:fig. 125). Codex fragments were also discovered beside the flexed skeleton of Burial A6 at the same site, and this corpse also was male, on the testimony of a stingray spine, which might have been held in its hand (R. E. Smith 1937:fig. 14). A third Lowland tomb for which there is evidence of a book is the very elaborate, high-status Tomb A–1/1 at Altun Ha (Pendergast 1979:fig. 16), where a codex had been placed at the feet of the defunct.

What did these codices look like? On a number of Late Classic Maya vases, there are representations of codices being read and even written (M. D. Coe 1977); the most famous example is the codex being inscribed by a little rabbit on the Princeton Vase (M. D. Coe 1978:16–21). These codices were all of the folding-screen variety, and all had jaguar-skin covers, rather than the decorated boards described by Landa (1941:28) for Late Postclassic Yucatan. We may be sure that the covers of the codices placed in tombs were of jaguar hide.

What was the content of these codices? I have long thought that the weird and complex Underworld scenes on pictorial Maya pottery, particularly on codex-style vases, were taken directly from long-disappeared books; in other words, there might well have been a Maya "Book of the Dead," exclusively concerned with the afterlife and the Underworld. In it, there might have been a strong emphasis on the visit of the Hero Twins to Xibalba and their triumph over the lords of death. This is all conjecture, but I believe it is likely that this was the content of codices placed in tombs to instruct the deceased in what was going to happen to him or her in the journey after death, and to enable that individual to triumph eventually over Xibalba and its lords.

Enemas

The Classic Maya enema ritual and its paraphernalia were first recognized on funerary pottery (M. D. Coe and Furst 1977). Nicholas Hellmuth and I, who have both been making intensive studies of pictorial ceramics, recognize this as one of the most important themes in Maya iconography and feel certain that archaeologists have overlooked the possibility that some of these paraphernalia may be among the artifacts recovered in excavation. The enema jar, which certainly contained an intoxicating or hallucinogenic liquid, has a very distinctive shape in funerary scenes, with a wide neck and broad rim. The syringe had a bulb of some perishable substance, such as rubber or deerskin, and what seems to have been a bone tube for insertion into the anus.

The logical place to look for such artifacts would be a tomb, since the enema ritual appears to have had strong connections with the Underworld. The deity most intimately associated with the enema is the quadripartite God N, or Pauahtun: singly, paired, or quadrupled, God N is often shown with a young female consort who is about to administer the enema. God N, the most frequently depicted deity on Classic Maya ceramics, is one of the principal lords of the Underworld. Furthermore, enema paraphernalia are very often present in palace scenes, which, I suggest, depict the ruler, not in the ''real'' world, but in the afterlife.

So few elite tombs have been published that one should not expect to find this material everywhere. But let us turn to Burial A31 in Structure A–V at Uaxactun, a high-status tomb of the Tzakol 3 period (A. L. Smith 1950:fig. 127). Next to the south wall of this tomb is a broad-mouthed, necked jar (R. E. Smith 1955:fig. 8,o), which is identical to the enema jars seen on pictorial ceramics. Next to it is a bone tube (Kidder 1947:fig. 81b,4), which could easily be the remains of an enema syringe. In the same way that many of the ''awls'' illustrated in archaeological reports could have been penis perforators, many of the objects described merely as ''bone tubes'' could have been syringe tubes. Another candidate for a tomb with enema paraphernalia is Burial A22, of the Tzakol 3 period at the same site (A. L. Smith 1950:fig. 121). The individual buried here, who, on the evidence of a single stingray spine at his left elbow (perhaps clasped in his right hand), was probably male, had a ''wide-mouthed red jar'' by his right knee and a bone tube at his left ankle; the jar (R. E. Smith 1955:fig. 6g) is surely an enema jar, and the tube (Kidder 1947:fig. 81c,3) is an ideal candidate for the ''business end'' of a syringe.

Dogs and Other Animals

The role of dogs in the Underworld beliefs of Mesoamerican peoples is well known: as described by Sahagún and others, the dog was sacrificed on the death of its master, so that it could carry his soul across a sinister river in the journey to the Land of the Dead. Dogs have been buried for this purpose since at least the Late Formative, and they have played a part in Lacandon Maya burial rites down to this day (Tozzer and Allen 1910:359–364). Dogs and dog deities appear on a number of Classic Maya funerary vases. It is, therefore, somewhat of a surprise that they do not appear more often in Maya tombs; two notable examples are the Esperanza-period tombs B–I and B–II at Kaminaljuyu (Kidder, Jennings, and Shook 1946:figs. 31, 32), in which a dog was placed in the northeast corner of each burial.

Other animals, such as jaguars, quail, parrots, and even crocodilians, have been reported as offerings in Classic Maya tombs, but their ideological significance in the funerary rite is unknown.

Music and Musical Instruments

The funerary procession must have been accompanied by musicians playing the instruments seen on pictorial ceramics: long wooden trumpets, upright drums, conch shells, and turtle carapaces beaten with antlers. This is the same battery of instruments that is featured in the Bonampak murals. In palace scenes on pottery, the musicians stand or sit somewhat offstage, so to speak, sometimes partly concealed behind a column. In "Dance of Death" scenes, in which macabre animals and gods dance, they play a more central role.

Wooden trumpets and upright drums would not withstand the ravages of climate and time in a Maya tomb, but conch and turtle shells would, and these are, in fact, fairly common burial furniture in the Classic period. Tomb A–I at Kaminaljuyu, for instance, contained a pair of shell trumpets and a turtle carapace, while Tomb A–IV, also of Early Classic Esperanza date, had two turtle carapaces (Kidder, Jennings, and Shook 1946:figs. 22, 26). The Early Classic Burial 10 at Tikal had no fewer than three turtle carapaces in the northeast corner (Coggins 1975:fig. 45).

The conch shell may have had a special significance in the funerary ceremonies. An association with death is suggested by the famous incised peccary skull from Copan (Spinden 1913:fig. 210), which shows Death God A carrying a burden by a tumpline and blowing a shell trumpet. Among the Aztec, the blowing of conch shells was associated with human sacrifice. In the *Manuscript of 1558* (León-Portilla 1963:107–109), the Central Mexican myth of the journey of Quetzalcoatl to Mictlan, the Underworld, Quetzalcoatl was told to blow the Death God's shell trumpet and circumnavigate the latter's realm four times. There were no finger holes in the instrument, but the worms made these, and bees entered the shell to sound the trumpet. I conclude that this story deals with the same theme of death and rebirth as that reflected in Quetzalcoatl's ritual bloodletting over the bones of man.

Copal Incense

To the late pre-Conquest Yucatec, copal incense was "the super odor of the center of heaven" (Tozzer, in Landa 1941:75, n.338). It was and still is the necessary accompaniment to all native Mesoamerican rituals. Remains of copal gum, both burned and unburned, were reported by A. L. Smith (1950:figs. 120, 121) in two Early Classic tombs at Uaxactun (A20 and A22) and undoubtedly would have been found elsewhere in the Maya Lowlands, if preservation of this organic substance had been better.

Some highland tombs of the Classic, such as those at Nebaj, in Quiche country, have large quantities of pottery censers, indirectly implying the importance of copal in the funerary ceremonies. Tall, cylindrical, "chimney" censers are characteristic of Palenque and the Chiapas hill country near this great site. It is interesting that these are effigies, with various supernatural faces and forms sculpted on the outside of the "chimney," often stacked up like Northwest Coast totem poles. Most of these censers are believed to have been found in deep caverns, traditionally the entrances to the Underworld in Maya belief, and the overwhelming majority have as their main iconographic theme the Jaguar God of the Underworld, the Night Sun on its nocturnal journey through the nether regions. The theme thus suggests that, although the wisps of sacred smoke may have been wafted toward the heavenly gods, they may also have been directed toward the land of the dead.

Flint and Obsidian

The greatest Maya tombs were sealed with a layer of flint chips and flakes, and "eccentric flints" appear in some of them, such as Tomb A–1/1 of Altun Ha. The symbolism of eccentric flints has yet to be worked out; in Peten caches, they usually appear in groups of nine, or multiples thereof, and must have had something to do with the Nine Lords of the Night (perhaps the patrons of the nine layers of the Underworld).

Here, I must again turn to Central Mexican ideology. Among the Aztec, flint and obsidian were equated, being cold substances from which knives could be produced and associated with the north and with frost and ice. The day sign *Tecpatl*, 'Flint,' was situated in the north—for the Aztec, the direction of death. In the Aztec cosmological scheme, the universe was layered like an onion, a scheme that is graphically portrayed in the Codex Ríos, or Vaticanus A (Nicholson 1971: table 2). The fourth and fifth layers of the Underworld were called, respectively, "Obsidian Knife Hill" and "Place of the Obsidian-Bladed Wind"; these, like the other layers of the infernal regions, had to be crossed by the soul at its peril on its journey to the deepest and ultimate hell. That this was a pan-Mesoamerican concept is suggested by the flint-bladed enclosures in the Underworld portion of the Borgia Codex, and by the House of Cold of the *Popol Vuh*, which the two sets of divine twins had to endure when in Xibalba.

The flint (or obsidian) capping of major tombs, therefore, would be a recognition that the tomb itself was actually *within* the Underworld, or Xibalba, beneath the layer of obsidian or flint knives; looking at it another way, it was itself the House of Cold of the *Popol Vuh*.

AN IDEOLOGICAL TOUR THROUGH THREE MAYA TOMBS

One of the best-reported elite burials in the Lowland Maya area is the so-called Sun God's Tomb at Altun Ha, Belize (Pendergast 1969). This burial was placed in Structure B–4 at the beginning of the Late Classic, and, apparently, the sepulcher was left open at the top to await the death of its occupant. According to Pendergast (ibid.:10), "the skeleton is unquestionably that of a male," but the osteological evidence is based exclusively (and dubiously) on skull characteristics, not on the pelvis. I raise the question because of the absence of stingray spines and the presence of three bone, eyed needles among the offerings, which suggest to me that this was a woman. Bloodletting is implied, however, by an antler-sliver pin with a bird on top; women did let blood, but not with stingray spines.

"Virtually the entire crypt appears to have been draped in cloth," much of which was apparently dyed red, and the body had probably been lowered into the crypt on a mat and placed on a specially built wooden platform. The offerings included the usual mirror, probably of pyrite mosaic; a necklace, bracelets, and anklets of jade, along with the massive jade head of a deity thought by Pendergast to be the Sun God; four pottery vessels, two of which were pictorial; and five *Spondylus* shells, perhaps laid on the shroud (see below). Before the tomb was closed, the body and most of the jades had been heavily smeared with red cinnabar, surely standing for blood and rebirth, and then the corpse was draped with felid skins, the symbol of royal power.

I should mention that Pendergast discovered the remains of a bolt of cloth or stack of pieces of cloth on the southwest corner of the wooden platform, just southwest of the corpse's head. Such offerings were probably universal in elite burials but, possibly because of faulty excavation techniques, difficult to detect. Bundles of cloth being offered as tribute or in honor of the gods and lords are frequently depicted on funerary pottery, such as the large bundle before the throne on the "Nebaj Vase" (Morley 1956:pl. 93a), and we do know from the Las Casas account of the northern Pokom (1909:629–631; Miles 1957:749–750) that the deceased's relatives and friendly lords brought many mantles to be placed in the tomb as offerings.

Our second tomb, Burial 116 at Tikal, has unhappily not yet been described in detail (Trik 1963; Coggins 1975:456–548). The renowned last resting place of the Late Classic personage known only as Ruler A, it is underneath the great Temple I, which was built to house the burial. The tomb was a vaulted chamber cut into the plaza floor. The corpse was laid out on its back on a mat and accompanied by sixteen and one-half pounds of worked jade; by three slate plaques (i.e., mirrors) fitted with mosaics of jade, pyrite, and shell; and by a jade mosaic cylinder vessel with lid. At his pelvis, as one might expect, were stingray spines and bone imitations of these; at the south end of a bench to the west of the ruler was a deposit of bone tubes, slivers, and "awls" (perforators?), which were magnificently incised. Twenty fine pottery vessels, some of them pictorial, also accompanied the deceased.

This tomb contains additional information on bloodletting. A pattern of *Spondylus* shells flanked the corpse, as though they had been attached to the border of his cape. Mary Miller and I have noted that this garment might have been identical to that worn by Figure 2 on Dumbarton Oaks Vase 15 (M. D. Coe 1975), a ruler (the same personage is seated on the throne to the right) in the act of perforating his own penis. His cape, which is semitransparent and set with *Spondylus* shells, may have been a special garment for bloodletting in the afterlife. The individual in the "Sun God's Tomb" at Altun Ha may have been wearing such a cape.

After Ruler A's body had been covered with jaguar pelts, the officiants departed, and the tomb was sealed by a central capstone, the underside of which was painted with a large red cinnabar spot. I suggest that this spot performed the same function as the "kill holes" on the dishes inverted over the heads of the far simpler interments at Altar de Sacrificios (fig. 6.1a): a place for the soul to exit upon its apotheosis. Then, with the vault completed, Ruler A's entire tomb was sealed with an enormous deposit of flint and obsidian chips, and the mighty temple-pyramid was erected over it.

Our final visit will be to the most celebrated of all Maya tombs, Pacal the Great's burial chamber beneath the Temple of the Inscriptions at Palenque. In ideological terms, this must be the acme of the Maya concern with the death and deification of their rulers. Although the pictorial vessels with their macabre messages—so common in the Peten and other Lowland Maya areas—were absent, the overall message is the same as in other great Maya tombs. Pacal was laid in his sarcophagus (which he had had built for himself) with an enormous amount of jade; this, and the vast quantity of red cinnabar with which everything had been coated, including his corpse, symbolized his eternal life after death.

All of this tomb furniture has been well described (Ruz Lhuillier 1973) and needs no elaboration. What is significant is the Sarcophagus itself—the outer walls, which have reliefs celebrating Pacal's ancestry, and the lid, on which Pacal is shown as a young man, descending like one of the Hero Twins into the Underworld through the jaws of death. He has identified himself with God K/Tezcatlipoca, for fixed in his head is the smoking tube of the "Smoking Mirror" god, the patron of royal descent. I follow my friend Moises Morales in viewing the world-tree above him as the "Tree of Life," through which his soul is to ascend, following his sojourn in Xibalba. As is well known, a covered passage, or what Ruz Lhuillier termed a "psychoduct," leads up from the tomb to the temple on top, to serve as a conduit for the exit of Pacal's soul to its ultimate apotheosis: the worship of him as a god by his descendants, including his great son, Chan-Bahlum.

CONCLUSIONS

The paraphernalia and ritual concerned with death had the deepest symbolic meaning for both the rulers and the ruled among the Classic Maya. Ethnohistorical sources on the Maya as they were on the eve of the Spanish Conquest do slight justice to this preoccupation, since the mental and sociopolitical life of the Lowland Maya was fundamentally altered by the Maya collapse of the ninth century. Classic Maya "cities" were, in my view, basically necropolises, in which the living were gathered to worship the honored dead. I hasten to add, however, that these were not Woodlawns or High-gates in the modern sense—vacant ''cities of the dead''—and neither were they anything like Egypt's Valley of the Kings, empty royal cemeteries.

If subfloor burial was the rule for Classic Maya commoners, as it seems to have been, then every Maya house was a sepulcher. The great Maya temple-pyramids were house-sepulchers writ large. The members of the Maya ruling class, who like other Mesoamerican elites seem to have considered themselves as separately created from divine stock, believed that they—unlike the commoners—would not become extinct after death and the dread journey to the Underworld. If my interpretation of the imagery on Classic Maya funerary pottery is correct, they, like the Hero Twins, would be recycled into the heavenly world, to be worshiped by their descendants, by royal and noble lineages, and by the commoners.

The burden of this preoccupation must have become intolerable to peasants suffering from increased population pressure and resultant agricultural crises. Enema and penis-perforator rituals carried out by jaguar-suited nobles may well have struck hungry farmers as not exactly the answer to *their* dreams. At any rate, this elite culture, with its books, ceremonies, macabre religion, and practices that most observers would say bordered on madness, disappeared by the end of the Classic; by then, the multitudinous denizens of the weird Maya Underworld were gone forever. Unlike the great Maya lords who had been their worshipers, they were never to be resurrected.

7

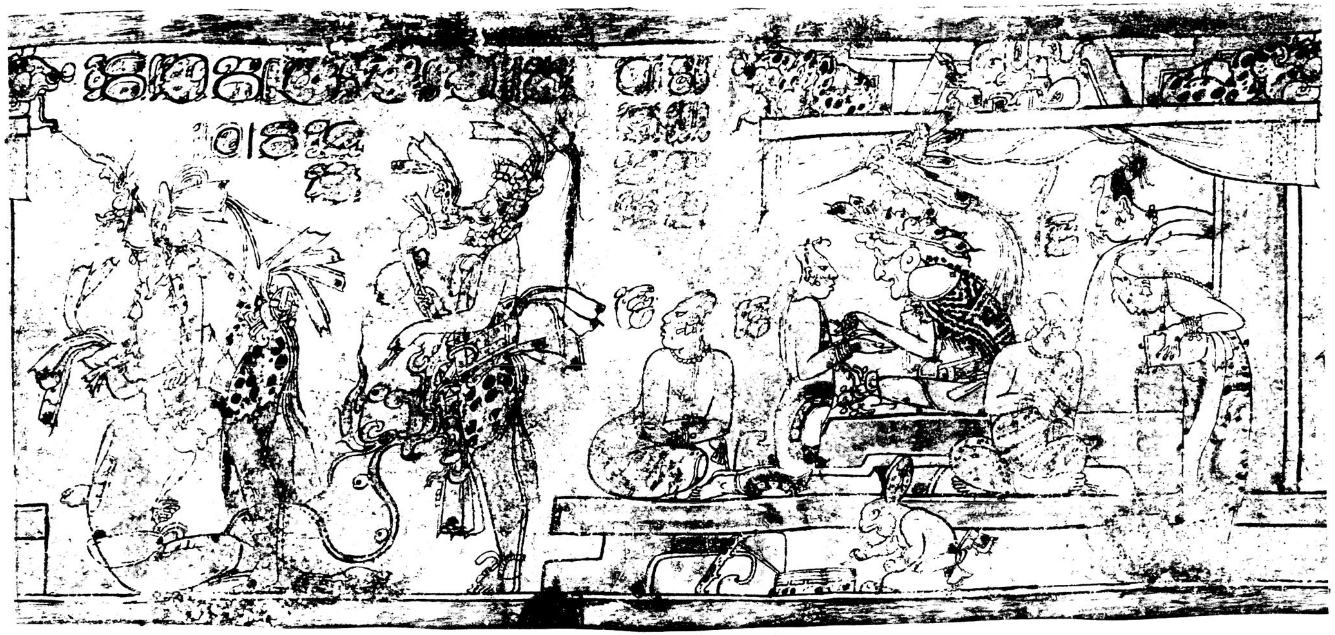
BARBARA AND JUSTIN KERR

Some Observations on Maya Vase Painters

One of our objectives in developing the photographic roll-out of Maya vases was the preservation of the original artist's hand. We felt that the drawing of vase roll-outs introduced an intrusive hand that altered the original—no matter how careful the drawing—and masked the identity of the Maya artist. Since completing the design and building of our roll-out camera, we have photographically rolled out approximately 225 vases. Often, when a vase was brought to the studio, it would provoke a flurry of file-searching, for suddenly here was a familiar face or style. We would search out a companion vase, delighted to have found another example of an individual artist's work. We realized that it would be useful to devise a systematic method that would enable us to determine whether a specific group of vases was painted by the same artist or school, and whether a time frame could be established for a group of vases. In this article, we will discuss some of the work of four artists or schools of painting.

THE FIRST GROUP

We have tried to locate other vases by the great artist who painted the Princeton Vase (fig. 7.1; M. D. Coe 1973:no. 42; 1978:no. 1), or by artists close to him, and so we selected a group of vases that seemed to show the same characteristics. We then developed a set of criteria for the "Princeton Painter." As in handwriting or fingerprint identification, there must be a number of points of similarity to make a match that is not merely coincidental. It is relatively easy to find similarities when the subject matter is the same; it becomes far more difficult when the elements depicted are different. It is also important to apply the same considerations to the Maya artist that we apply to other artists—they may not always be at the peak of their form, for example. Even great artists have painted lesser works, which, if not signed, might be attributed to a student or follower. We must allow the Maya artist leeway where human feelings and failings are concerned. Moreover, it should be kept in mind that our subjective opinions, based on seeing a quantity of material, played a very large and important part in our decisions.



A

7.1 First Group, Vase A. (The Art Museum, Princeton University. Roll-out photograph copyright Justin Kerr, 1980.)

We looked for consistency of style and detail but decided not to demand that every feature match; if a vase seemed to have a strong resemblance to our standard, and if a majority of the points matched, it would qualify for inclusion. (Many artists may paint single elements in the same way.) We selected a group of vases that appeared to have similarities in style, composition, spatial arrangement, brush strokes, glyphic writing, and sometimes even subject matter, and then we prepared a chart on which to note our findings (chart 7.1). From the Princeton Vase, we selected certain characteristics to compare with those on the other vases that seemed to be related. For ease of discussion, we have labeled the vases A, B, C, and so on (fig. 7.2).

Seven vases appeared to have close connections with the Princeton Vase, or Princeton 1, our Vase A.

Vase B. Princeton 2, a throne scene (M. D. Coe 1978:no. 2).

Vase C. A group of characters with painted faces, in the act of performing a

Shared Details Princeton Vase	A	B	C	D	E	F	G	H
Spacing of composition	√ ⊛	√	√ ⊛	√	√	√	√	+
Naturalistic body positions	√ ⊛	√	√ ⊛	√ ⊛	√ ⊛	√	√ ⊛	√ ⊛
Calligraphy—whiplash and flamelike line	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛
Color wash paint puddles	√ ⊛	○	√ ⊛	○	○	○	○	○
Hair wisps at nape of neck	√ ⊛	√	√ ⊛	√ ⊛	√ ⊛	√ ⊛	+	+
Double lines along edges	⊛		⊛		⊛		⊛	
Softness in fabric treatment	√	√	√	○	√	+	√	+
Drawing and style of profiles	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	+
Eyes	√ ⊛	√	√ ⊛	√ ⊛	√ ⊛	√	√	+
Feet	√ ⊛	√	○	○	√ ⊛	√ ⊛	√	√
Hands and fingers	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√	√	√

KEY:

√ Similarity of element on vase
⊛ Striking similarity
+ Element exists but does not match
○ Element does not exist for comparison

Chart 7.1 Comparison of details in First Group.

sacrifice of what seems to be a child. We call this vase "The Barbarians" (Robicsek and Hales 1981:no. 111).

Vase D. A group of women assembling the adornments for headdresses (Robicsek and Hales 1981:no. 82).

Vase E. Two God Ns with four men from different tribes(?). Is this perhaps a scene of calendric adjustment? (Robicsek and Hales 1981:no. 56).

Vase F. The Hero Twins, holding torches, and GI bound (previously unpublished).

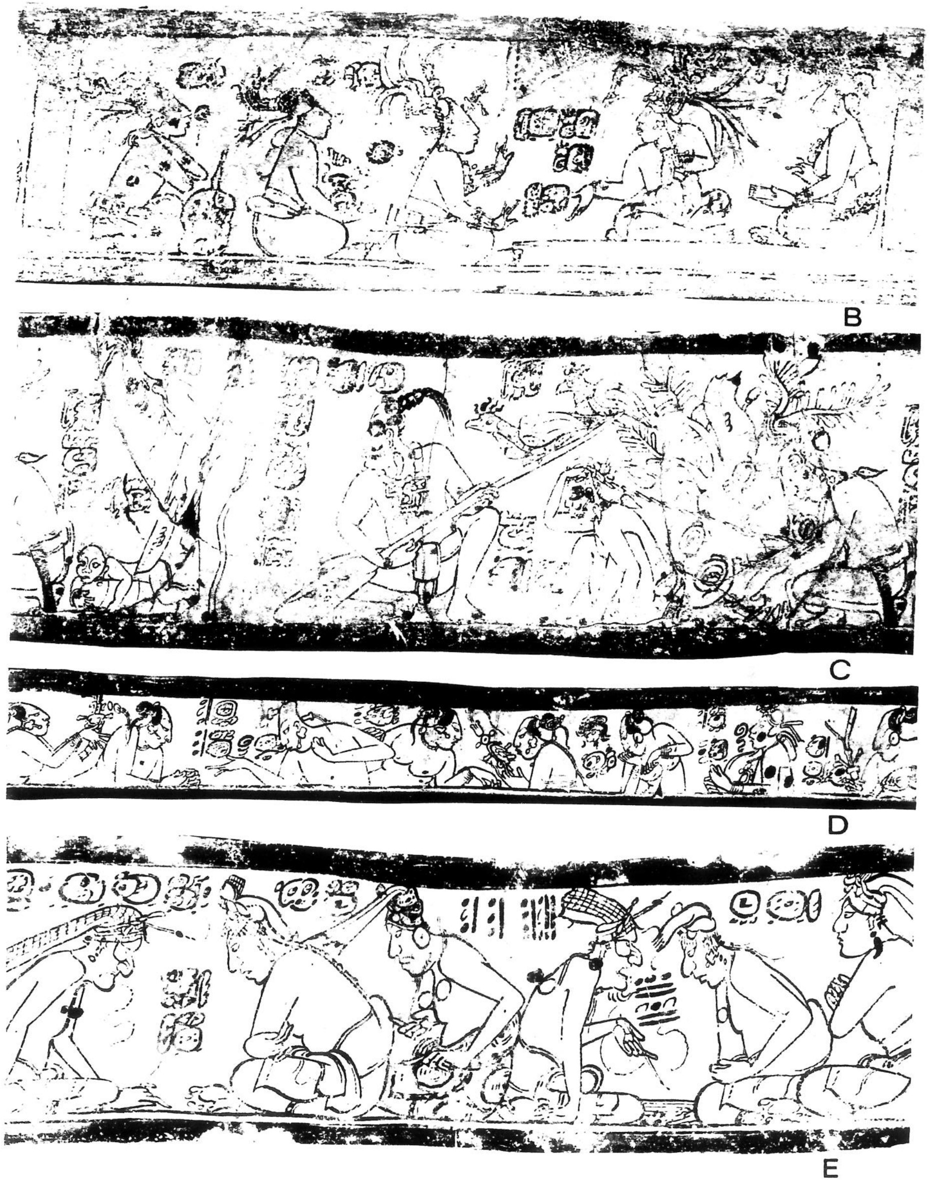
Vase G. A monkey-man god sitting on a throne, accepting offerings from other scribe gods (Robicsek and Hales 1981:no. 68, 1982:no. 10).

Vase H. A blow-gunner (Hunahpu or Xbalanque), shooting at a bird in a tree (Robicsek and Hales 1981:no. 109; 1982:no. 20).

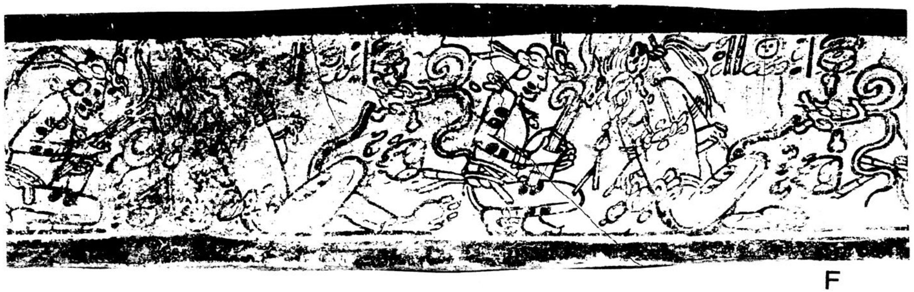
Each composition has a tight-fitting structure of figures placed firmly on the base line, somewhat squeezed toward the top band, and with relatively even spacing between figures. The density of the figures occupying the space is consistent from vase to vase. There are some virtually identical poses. The figures are realistically proportioned, and the body positions of most of them are naturalistic.

On Vases A and C (fig. 7.3), the drawing of the curve of the chest and the line of the belly on the standing figures of the executioners are made in the same way: the legs are drawn together with exactly the same proportion and in the same stance. We superimposed these figures and found them to be almost identical. Only on these two vases is there what appears to be a thin brown wash on the figures, which ends in little puddles at the head, belt, feet, and hand. (These are *not* death spots, which are seen on all the characters on the two vases.) On Vases A, E, and G (fig. 7.4), the painting is a fine calligraphic line, with flamelike shapes in the scrolls and volutes and a whiplash stroke at the ends of lines in the fabrics. This artist or school also favors little wisps of hair at the napes of necks (fig. 7.5). In all the figures where cloth is depicted, there is an identical treatment of fabric—a double line along the edges and curves of clothing. The drawing style of the profiles on Vases A, B, C, D, E, and G (fig. 7.6) seemed so similar that, when slides were made of individual faces, we found it difficult to put the correct face on the proper vase.

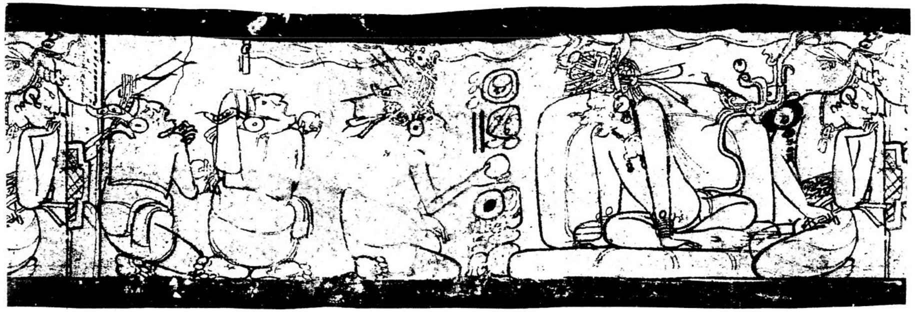
Wanting to be yet more specific, we examined the small details that might stamp an individual artist, even if he was trying to change his "handwriting," or was using a new brush, or was tired—or inspired. The drawing of hands or eyes is comparable to the way we cross our t's and dot our i's—usually not changeable with mood. On almost every vase, we found that the eyes are drawn with the upper lid like a curved bow, ending with a hook or dot to form the eyeball. The upper lip always has a little "cut," or angle, to describe the form. Of the six vases that show the soles of the feet, all are similar; they are reasonably well proportioned to the body, with the toes circled clearly



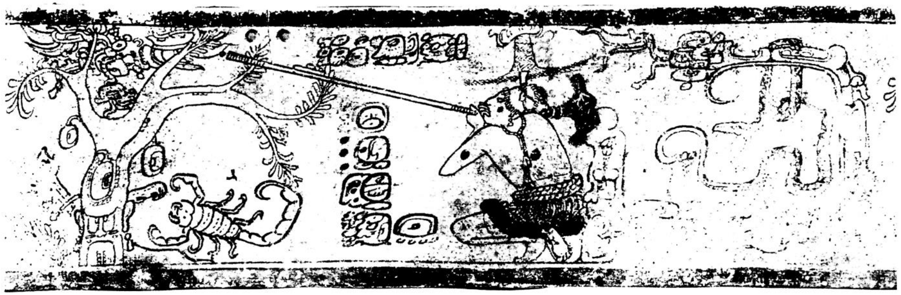
7.2 First Group, Vases B–H. (Vase B, The Art Museum, Princeton University. Roll-out photographs copyright Justin Kerr, 1980.)



F



G



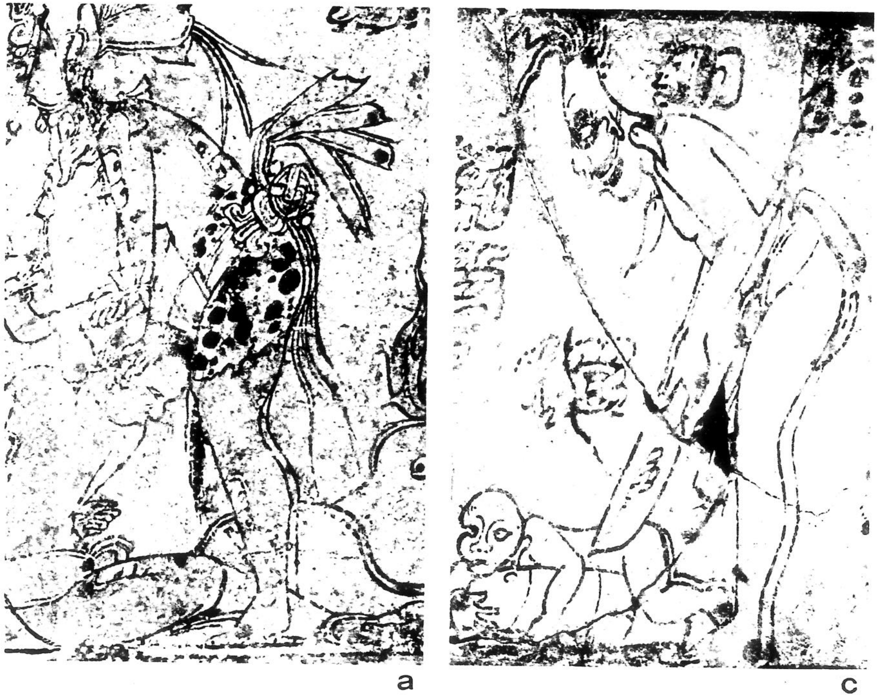
H

and the soles marked with curved lines. Vases A, E, and F (fig. 7.7) are particularly close.

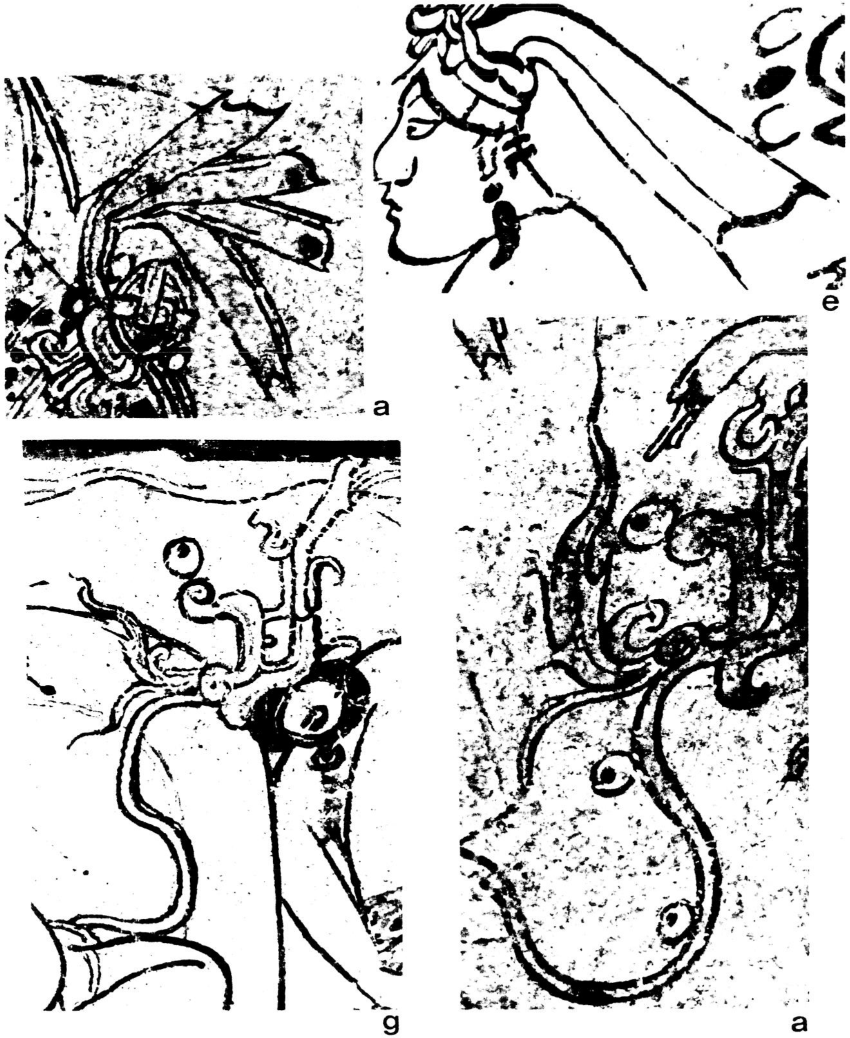
The hands are especially interesting (fig. 7.8). The particular view shown on each vase reveals very flexible, slim, well-proportioned fingers in a variety of elegant poses. The little finger often seems to have been drawn after the rest of the hand. The view shown is that of a hand in motion, observed exactly at eye level. Some of the fingers have strongly delineated pads on the tips, especially on Vases A, B, C, and F.

One of the most striking examples of stylistic similarity is in the painting of the "hand-holding-vase" motif on Vases A and C (fig. 7.9). Both vases have sacrifice scenes, and the painting of the two executioner figures confirms the similarity between them.

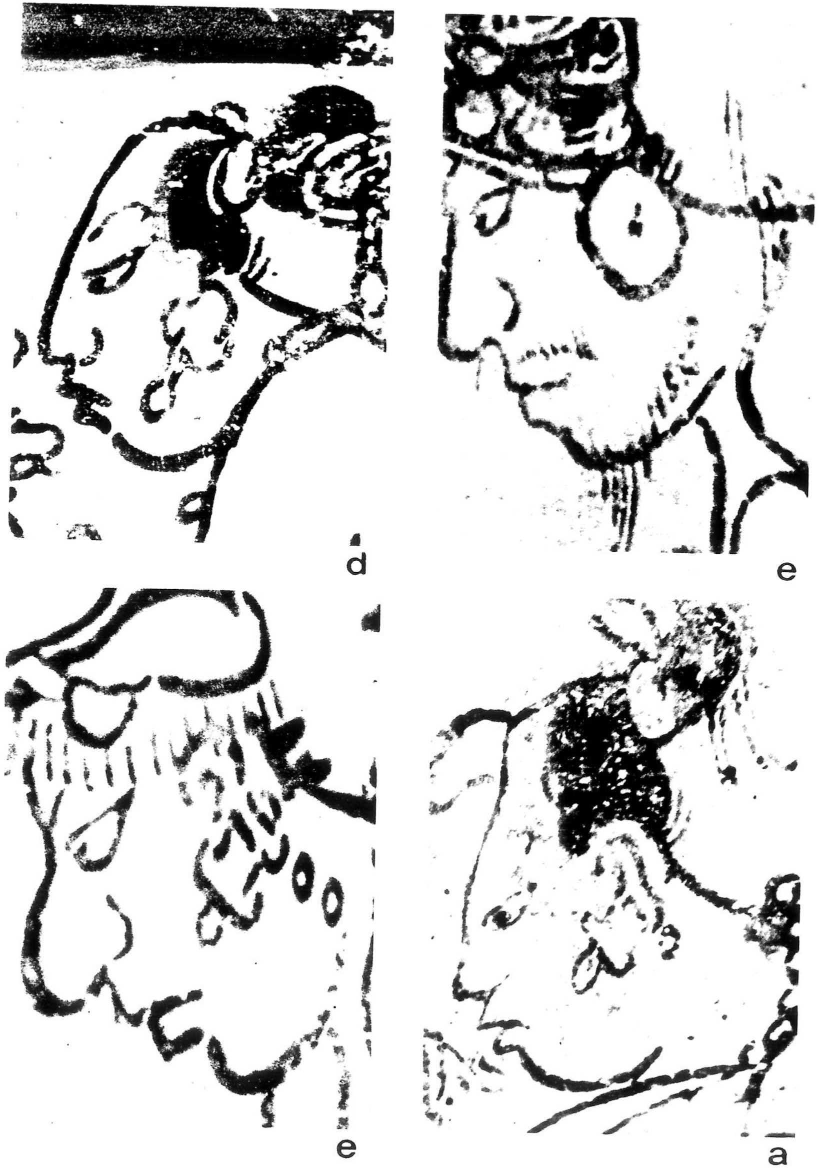
Ornaments are a notable feature. Vases A, D, F, and G have identical bracelets, which are drawn with thin horizontal bands. God L is tying one of these bracelets. Ear ornaments, however, differ, and more than one style of ear ornament may appear on a



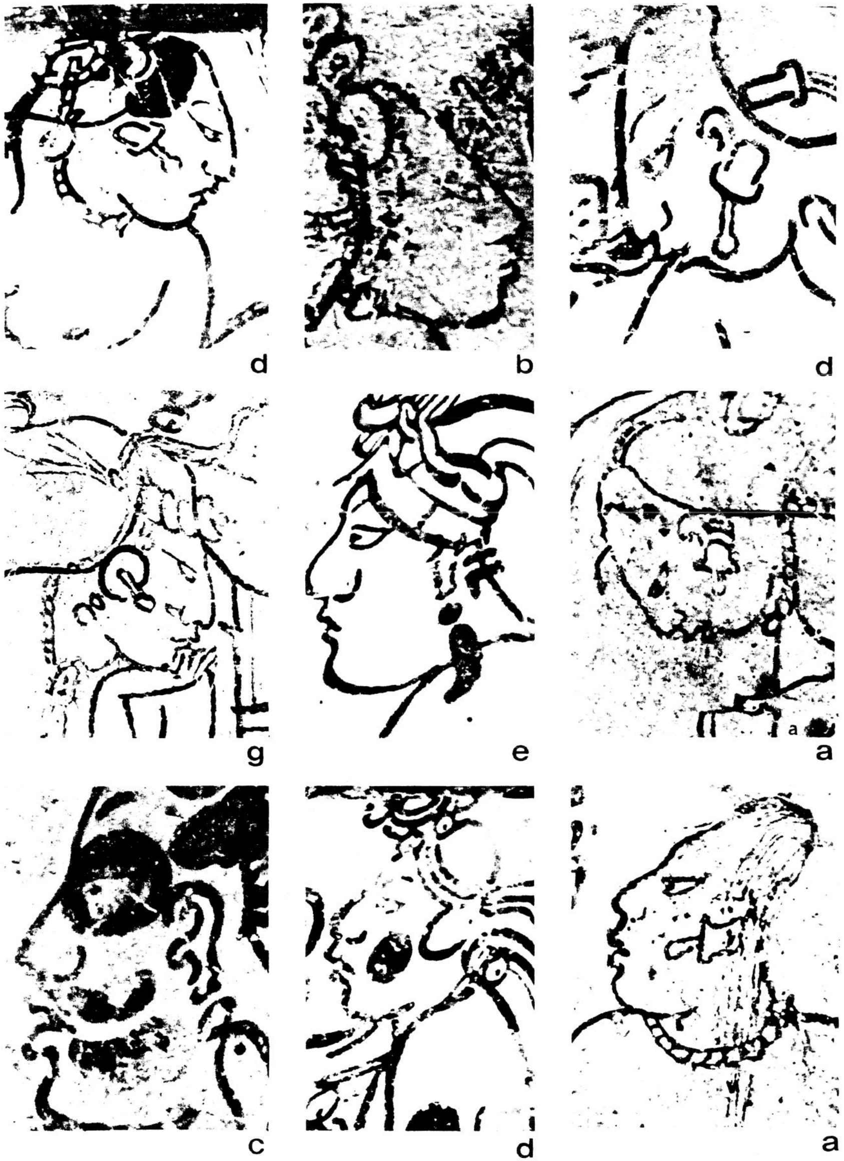
7.3 First Group, Vases A and C, details. (Photographs copyright Justin Kerr, 1980.)



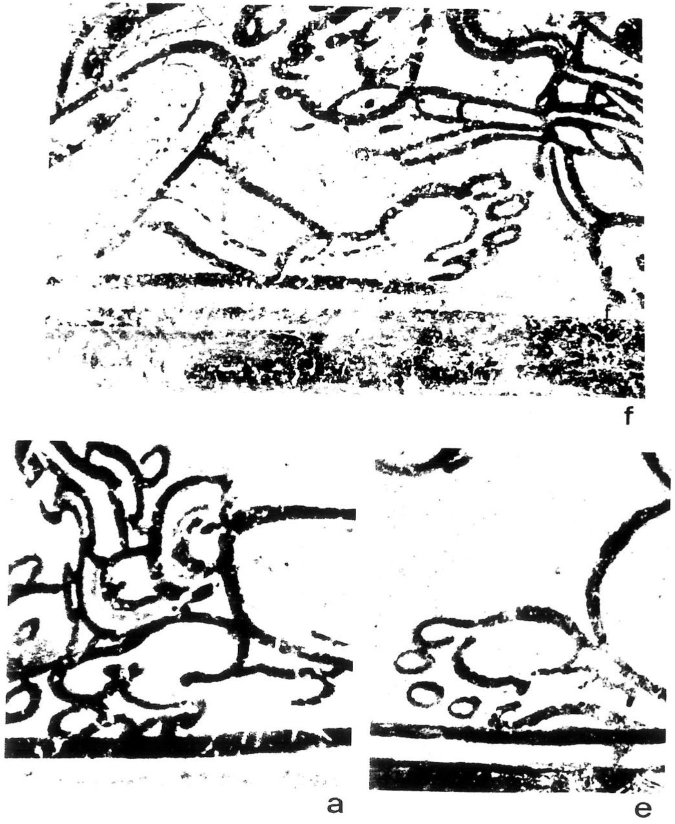
7.4 First Group, Vases A, E, and G, details. (Photographs copyright Justin Kerr, 1980.)



7.5 First Group, Vases A, D, and E, details. (Photographs copyright Justin Kerr, 1980.)



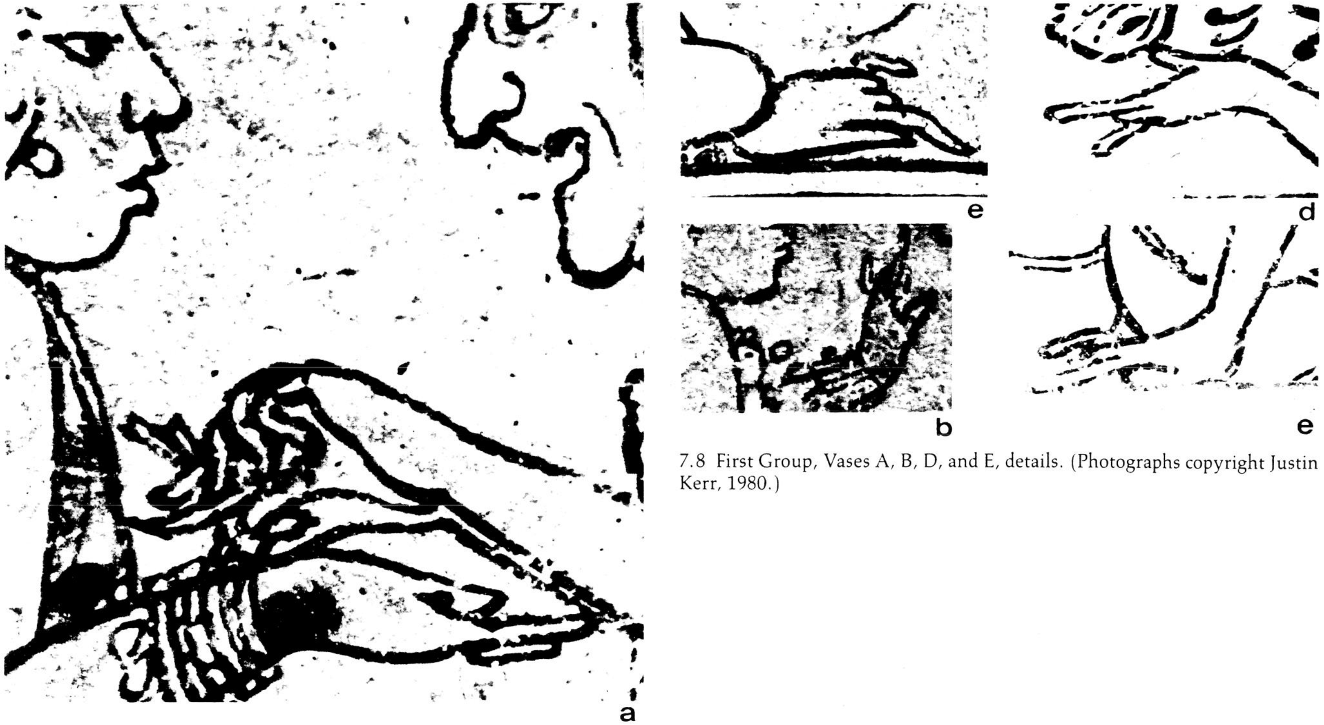
7.6 First Group, Vases A–E and G, details. (Photographs copyright Justin Kerr, 1980.)



7.7 First Group, Vases A, E, and F, details. (Photographs copyright Justin Kerr, 1980.)

vase. There are five distinct styles: a circle with a small circle in the center (Vases A and G); a circle with a long bead (Vases D and G); a flare with a break in the drawing (Vases D and E); a flare with rounded contours (Vases A and B); and a very unusual teardrop shape, which probably represents a jaguar tooth (Vases C and E).

Vases G and H appear to share characteristics and to be associated with the school of the "Princeton Painter." They both show the backs of figures, which is unusual. Lines in the soles of the feet are handled in the same way. Vase B fits into this group compositionally as well as in drawing style. Vases D and E are unquestionably painted by the same hand; the spacing and brush line confirm this. Vase F may also be by the



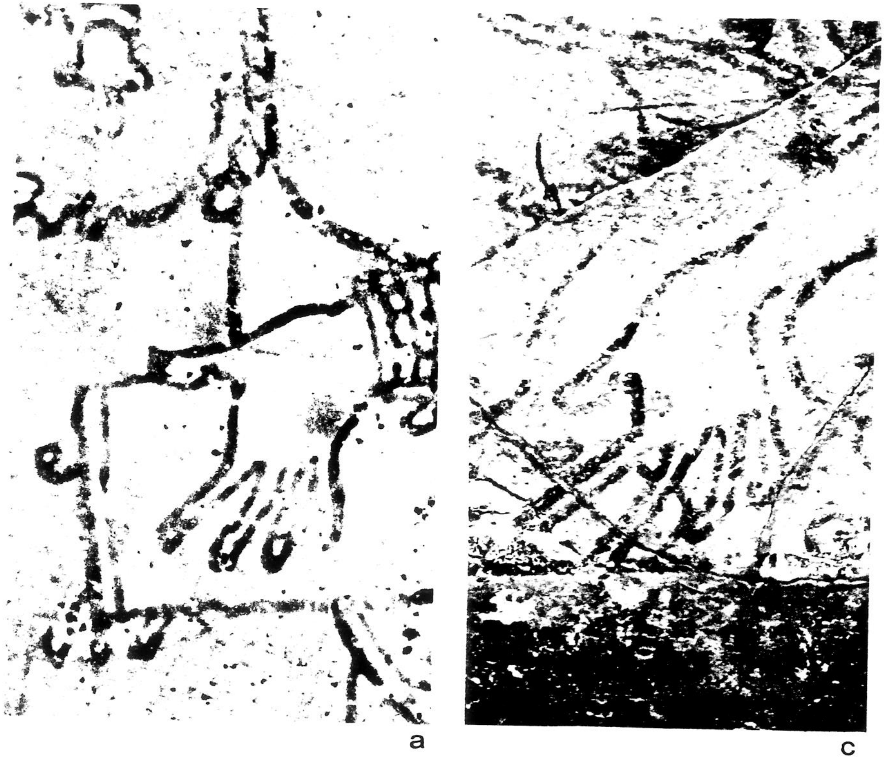
7.8 First Group, Vases A, B, D, and E, details. (Photographs copyright Justin Kerr, 1980.)

same hand, for the glyphic handwriting is the same. These vases are certainly closely associated with the artist of the Princeton Vase.

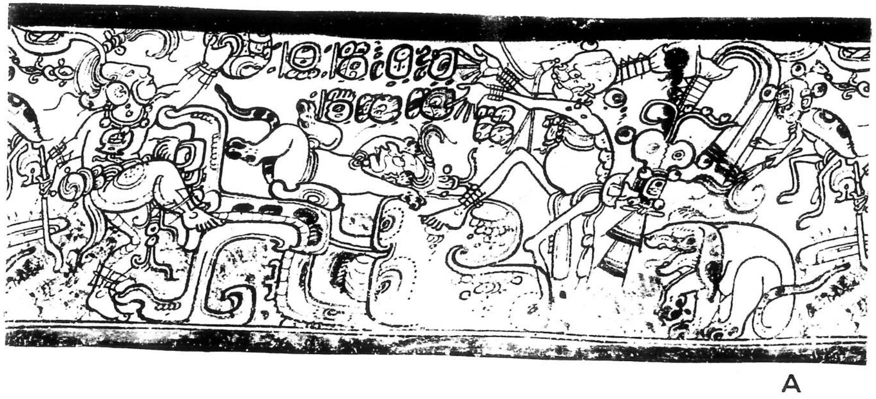
Vases A and C are by the same hand. We determined that Vase C has the greatest number of points of identity with Vase A, even though, because the subject matter is different, it does not seem to resemble the Princeton Vase. The brush lines, the position and stance of the executioner figures, and the drawing of the hands were the most convincing similarities.

The Second Group

The next group, or school, of artists we would like to consider revolve around a vase in the collection of the Metropolitan Museum of Art (fig. 7.10; M. D. Coe 1973:no. 45, 1978:no. 4). With this group, we had to adjust our criteria so that they would relate to



7.9 First Group, Vases A and C, details. (Photographs copyright Justin Kerr, 1980.)



7.10 Second Group, Vase A. (Metropolitan Museum of Art. Roll-out photograph copyright Justin Kerr, 1980.)

the characteristics of the vases we now wish to compare. Again, we prepared a chart and tried to find points of comparison in the details (chart 7.2).

We have a total of seven vases in this group (fig. 7.11).

Vase A. The Metropolitan vase.
Vase B. The sacrifice of the baby Jaguar God of the Underworld, with God A, the baby, GI, a jaguar, and a firefly (Robicsek and Hales 1981:no. 19).
Vase C. The same scene (Robicsek and Hales 1981:no. 22).
Vase D. The same scene, with God A and GI dropping below the rim (Robicsek and Hales 1981:no. 27).
Vase E. A group we will refer to as the animal parade: a toad, a conch-blower coming from the mouth of the bearded dragon, and a jaguar (M. D. Coe 1978:no. 3).
Vase F. The animal parade, with a monkey substituted for the bearded dragon; note Landa's U in the ear of the dragon and the monkey (Robicsek and Hales 1981:no. 47; 1982:no. 17).
Vase G. The monkey and the rodent; note the "band-aid" glyph in the ear of this monkey and in that of the conch-blower (Robicsek and Hales 1981:no. 48).

M. D. Coe points out (1978:27) that Vase A and Vase E (Princeton 4 and Princeton 3) are by the same artist. We think that we can add five more vases to this artist's repertoire. If these vases were not painted by the same hand, they were painted very close to each other—under the same lintel. The spacing and fit of the figures on the vases are squeezed slightly at the top and bottom borders. The body poses convey a feeling of action and thrust (fig. 7.12). The calligraphy of the line is thick and thin; very characteristic is a "nervous line," which seems to be a method of controlling the brush stroke by pushing the brush slightly, rather than drawing it out on long lines. This type of line appears on all the vases but two, A and B (fig. 7.13). Another obvious similarity is in the handling of hair, knots, fringe, and so on. A group of concentric lines—thick and thin, light and dark—are employed to make the mass of these motifs (fig. 7.14).

On Vases A and B, the construction of the feet is identical. The proportions are good, and there is the suggestion of an ankle bone.

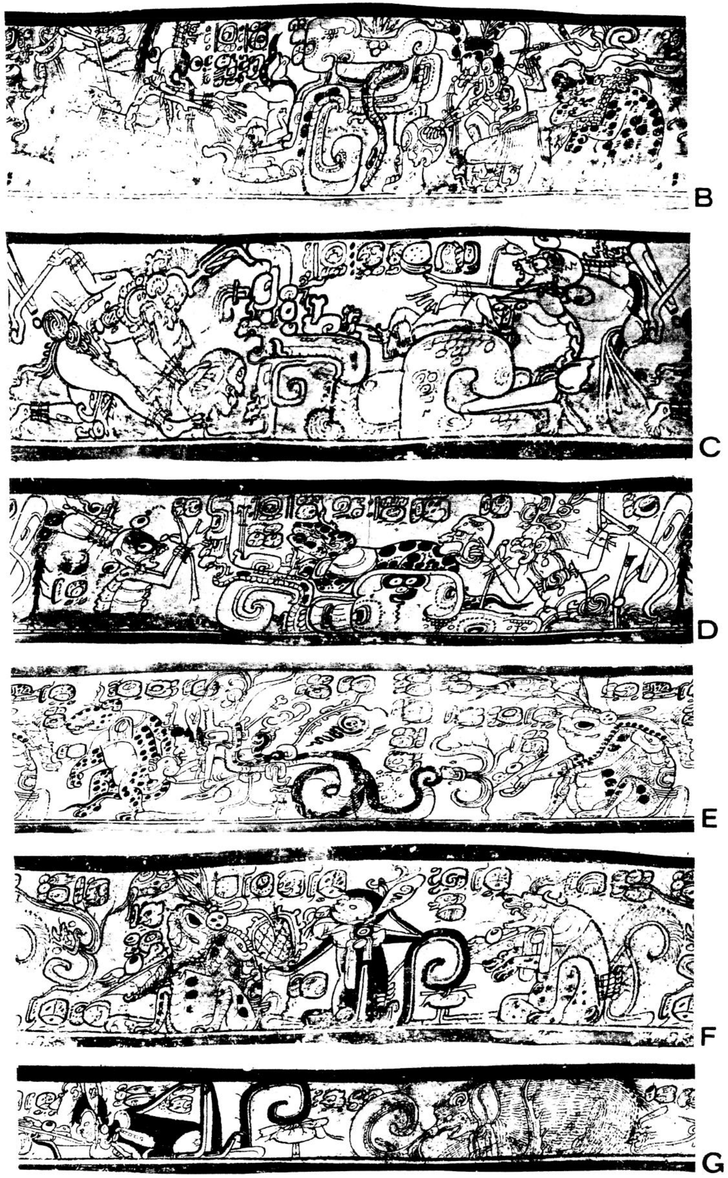
In regard to the individuals on these vases, the points of comparison are numerous. God A—with carefully drawn human hands, bony elbows, overlapping spinal bones, and curved ribs around a bloated belly—appears on Vases A, B, C, and D. His headdress, on the last three examples, has the Jester God head and round knots; on Vase A, it lacks the god and carries angular knots. On Vases A, C, and D, GI has the knotted, ragged hair, while on Vase B, God A has it. On Vases A and B, the firefly appears, again drawn by the same hand. The figures of the toad on Vases E and F are al-

Shared Details Metropolitan Vase		A	B	C	D	E	F	G
Spacing of composition		√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛
Action and thrust of body positions		√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛
Calligraphy—''nervous line'' of brush control		√ ⊛	√ ⊛	√ ⊛	√	√ ⊛	√ ⊛	√
Fine line in hair and knots		√ ⊛	○	√ ⊛	√ ⊛	√ ⊛	○	○
Whiplash edges on fabrics		√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛	√ ⊛
Human feet		√ ⊛	√ ⊛	√	○	○	○	○
Hands and fingers		√ ⊛	√ ⊛	√	√	○	○	○
God A	Hands	√ ⊛	√ ⊛	√	√	○	○	○
	Elbows	√ ⊛	√ ⊛	√ ⊛	√	○	○	○
	Spine & ribs	√ ⊛	√ ⊛	√ ⊛	√	○	○	○
Firefly		√ ⊛	√ ⊛	○	○	○	○	○
Eyes and paws of jaguars and dog		√ ⊛	√ ⊛	○	√ ⊛	√ ⊛	√	√
Monkeys		○	○	○	○	○	√	√
Frogs		○	○	○	○	√ ⊛	√ ⊛	○
Drawing of the elements in the cache bowl		○	○	○	○	√ ⊛	√ ⊛	√ ⊛

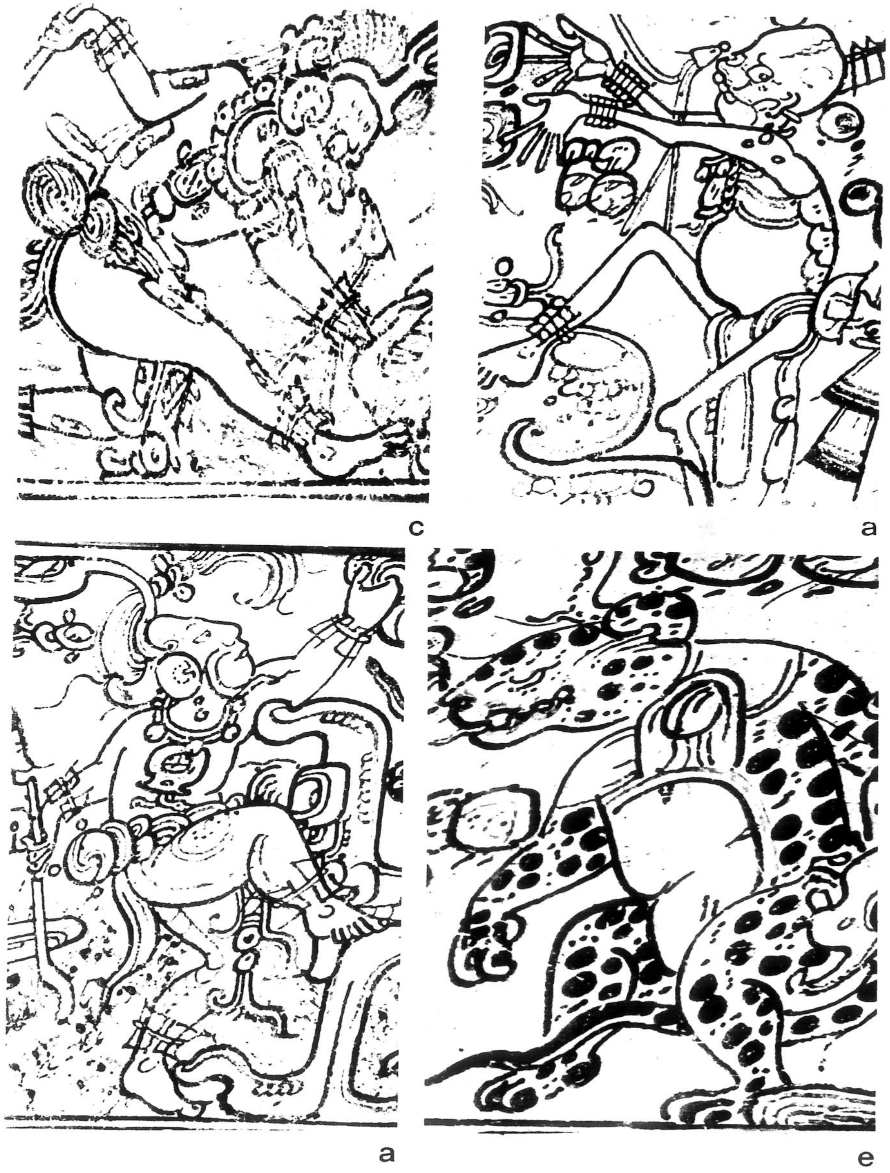
KEY:

√ Similarity of element on vase
⊛ Striking similarity
+ Element exists but does not match
○ Element does not exist for comparison

Chart 7.2 Comparison of details in Second Group.



7.11 Second Group, Vases B–G. (Roll-out photographs copyright Justin Kerr, 1980.)



7.12 Second Group, Vases A, C, and E, details. (Photographs copyright Justin Kerr, 1980.)

most identical. (Another artist's depiction of a toad, shown in fig. 7.16, illustrates how different it can be.)

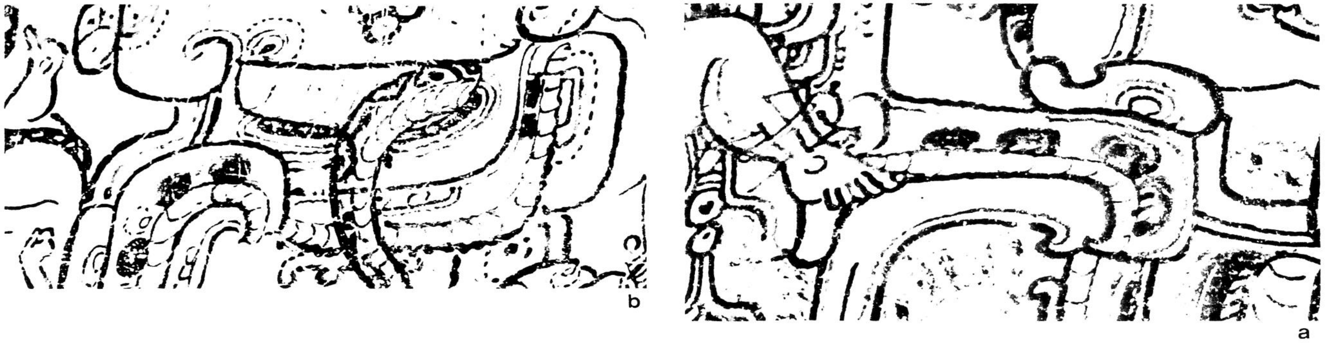
We believe that the glyphs on this group of vases were painted by the hand that painted the total scene, for the glyphs are integral to the total design; sometimes they are half-hidden behind a figure.

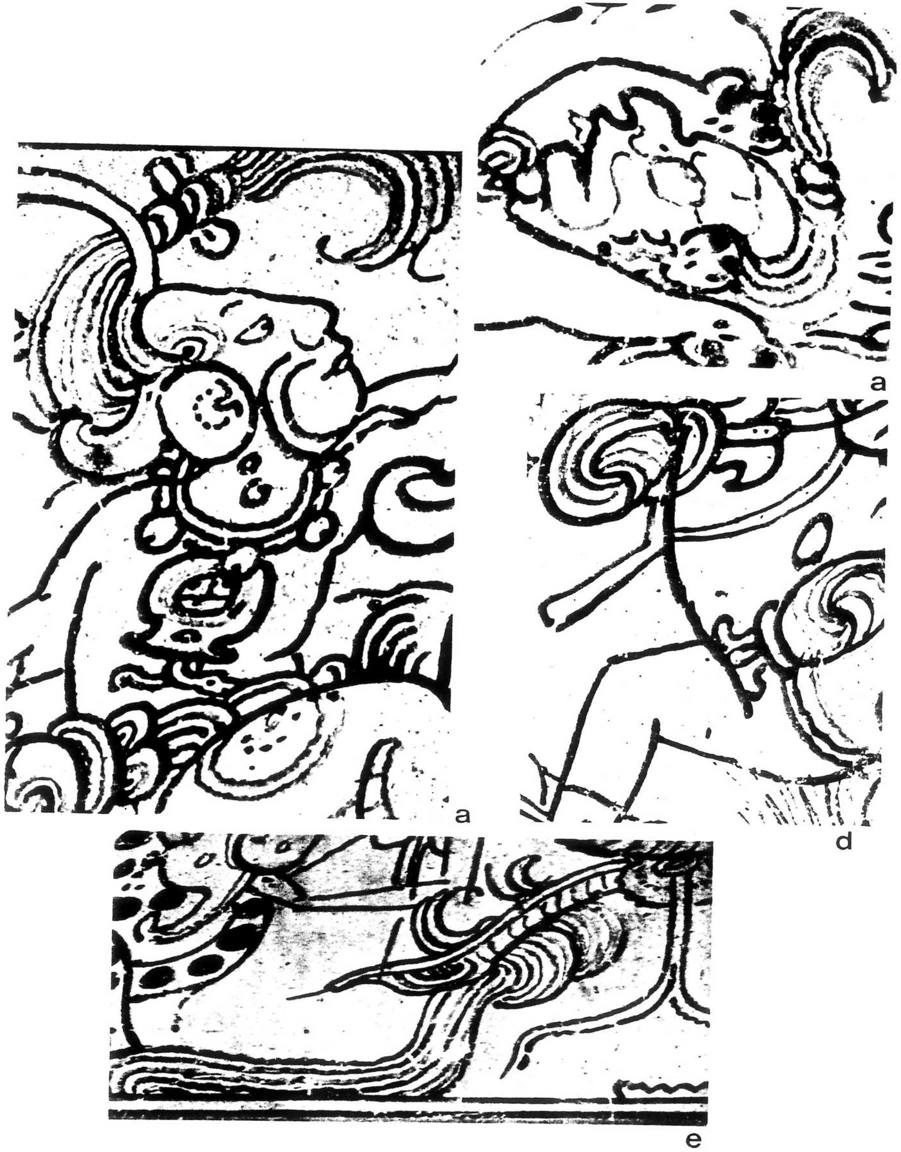
We did not include in our original Second Group a dynasty vase that seemed to have similar handwriting. When we compared the jaguar glyph on the dynasty vase with the jaguar on Vase E, we found the brush stroke and the drawing of the mouth and eyes to be amazingly similar. We compared the Primary Standard glyphs on the same two vases, and realized that the dynasty vase was painted by the artist who painted Vase E (fig. 7.15). This led us to conclude that the same artist painted not only figures and scenes, but glyphic texts as well. We have concluded that all the vases in the "Metropolitan" group were painted by the same artist.

The Third Group

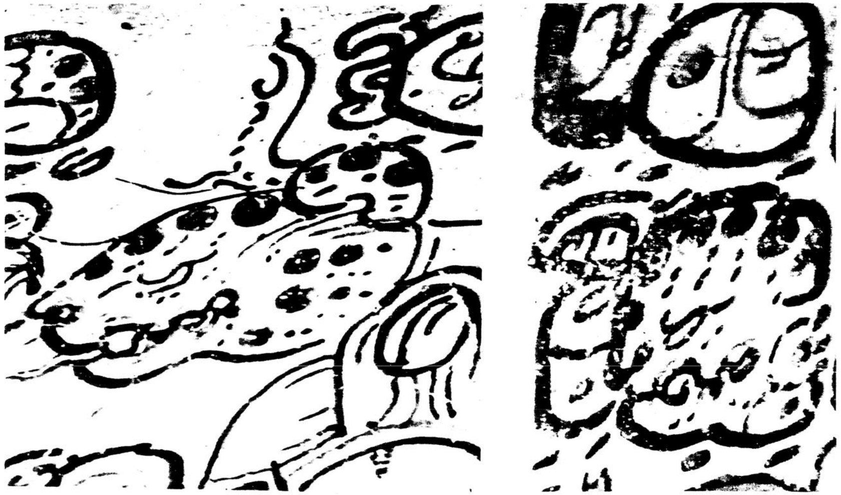
We were fascinated by another painter, who painted a scene identical to that we have just examined, but who produced only two vases that we have found (fig. 7.16). We call him the "Fantastic Painter," because of his rather surreal interpretations of the "animal parade" and the sacrifice of the Jaguar God of the Underworld, which are expressed in a unique style, handwriting, and use of space. It would be interesting to compare various artists' interpretations of the same story—interpretations which used all the necessary iconographic features, but in individual styles; for example, the glyphic element at God A's back bears identical information in all the depictions reproduced here, but it but may appear in two different styles. The hallmark of the "Fan-

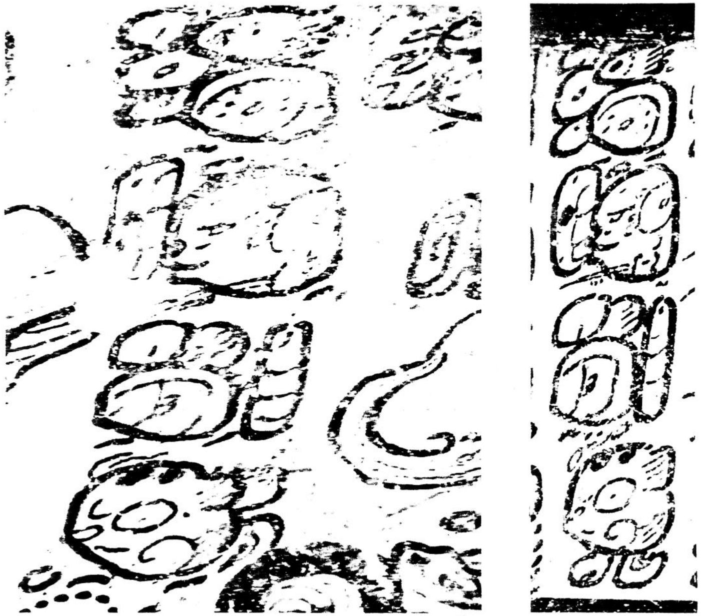
7.13 Second Group, Vases A and B, details. (Photographs copyright Justin Kerr, 1980.)



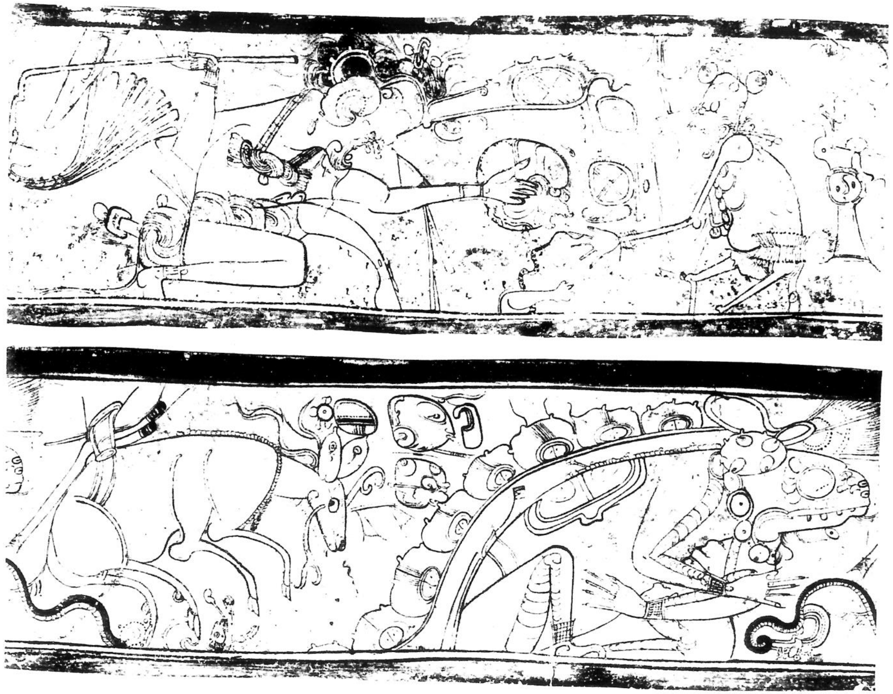


7.14 Second Group, Vases A, D, and E, details. (Photographs copyright Justin Kerr, 1980.)


e


e

7.15 Second Group, Vase E, details. (Photograph copyright Justin Kerr, 1980.)



7.16 Third Group, Vases A and B. (Roll-out photographs copyright Justin Kerr, 1980.)

tastic Painter'' is his incredibly fine line, his design of spatial areas, and the graphic treatment of details. The glyphic handwriting matches his style perfectly, confirming our belief that, where the glyphs are integral with the design of the vase, they are invariably drawn by the same hand.

The figures have a dreamlike quality; they float in a nightmarish space. This artist further tantalizes us by dropping an important character below the base line (possibly into the Underworld?). Here are the feet and tail of the baby Jaguar God of the Underworld, who, with a little critter from the ''animal parade'' theme, is falling off into the nether world.

THE FOURTH GROUP

Some years ago, we photographed a polychrome vase, which is in the Kimbell Art Museum in Fort Worth, Texas (fig. 7.17). On it, a procession of warriors and officials, or priests, wearing sacrificial scarves, escorts a naked prisoner who has his hands bound behind him, paper ornaments in his ears, and what may be a sacrificial scarf hanging from his chest. The prisoner is preceded by an individual wearing blood-splattered paper clothing and a "sacrifice" glyph for a headdress. He is followed by a figure wearing a complete jaguar skin and holding what appears to be the instrument of execution.

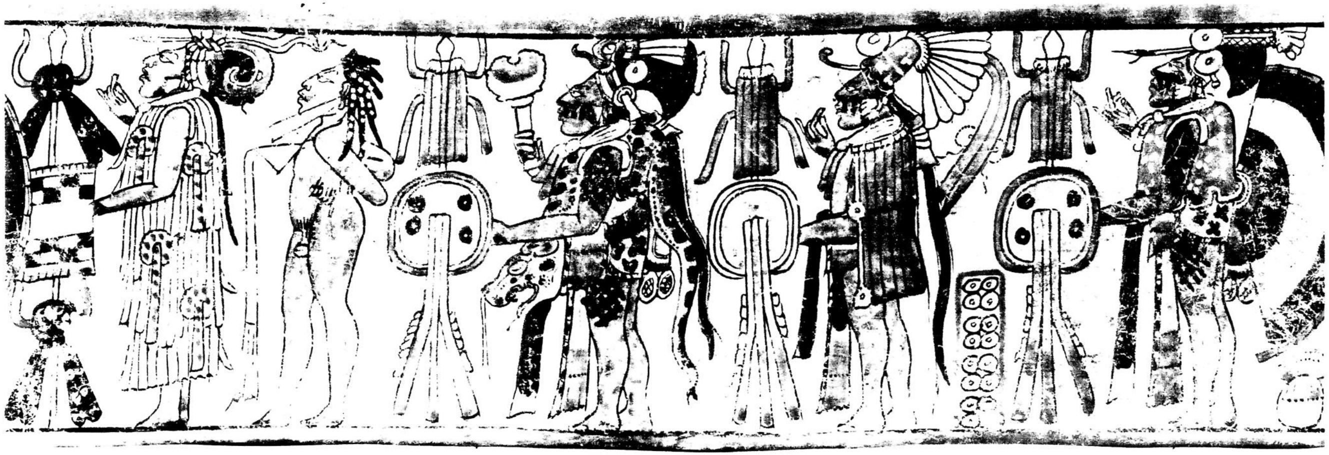
We then photographed, for Dr. Edwin Pearlman, a vase that looked very familiar (fig. 7.18; M. D. Coe 1982a:no. 5). It occurred to us that the characters on it had been in our studio before. Finding the photographs of the Kimbell vase in our file, we realized that we had the continuing story by the same painter. On the Pearlman vase, there are four warriors in marching order, in full regalia, carrying feathered staffs, and wearing trophy heads at their waists. The same glyphic panel appears on both vases, and there are similar tied bundles on the ground in both.

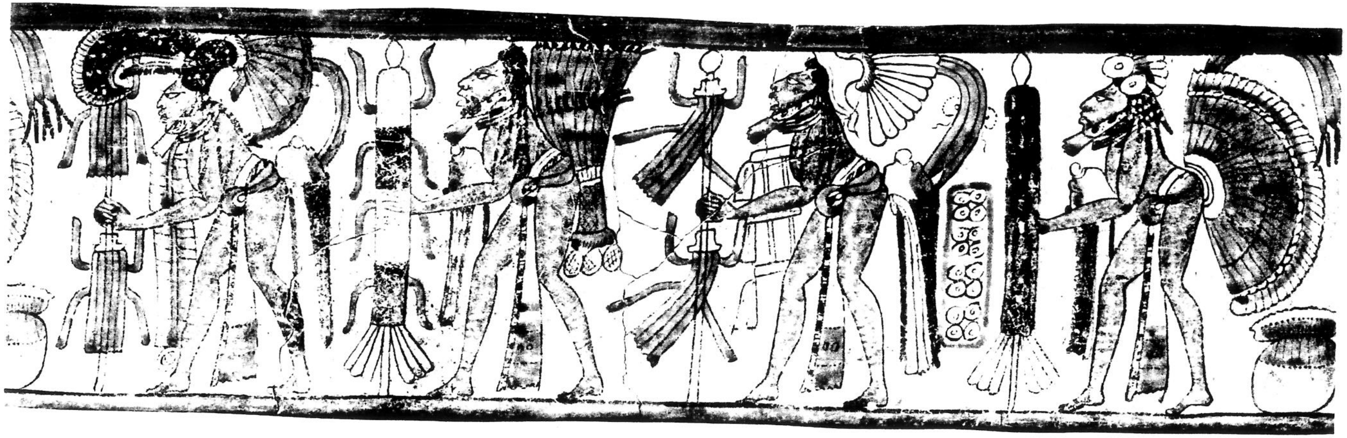
Since the figures on the Pearlman vase have braided hairdos with white spots, we believe that the prisoner on the Kimbell vase, with similar hair style, is one of these figures, and that the feathered staffs carried by his possible executioner and the rest of the retinue portray the capture of this warrior's insignia.

When we showed this remarkable comparison to Dr. Pearlman, he advised us that another vase by the same hand was in the Museum of the American Indian. With the kind cooperation of Dr. Anna Roosevelt and staff, we were able to examine and roll out this vase (fig. 7.19).

The vase, which is slightly different in shape from the others (they are straight-

7.17 Fourth Group, vase. (Kimbell Art Museum. Roll-out photograph copyright Justin Kerr, 1980.)





7.18 Fourth Group, vase. (The Pearlman Collection. Roll-out photograph copyright Justin Kerr, 1980.)

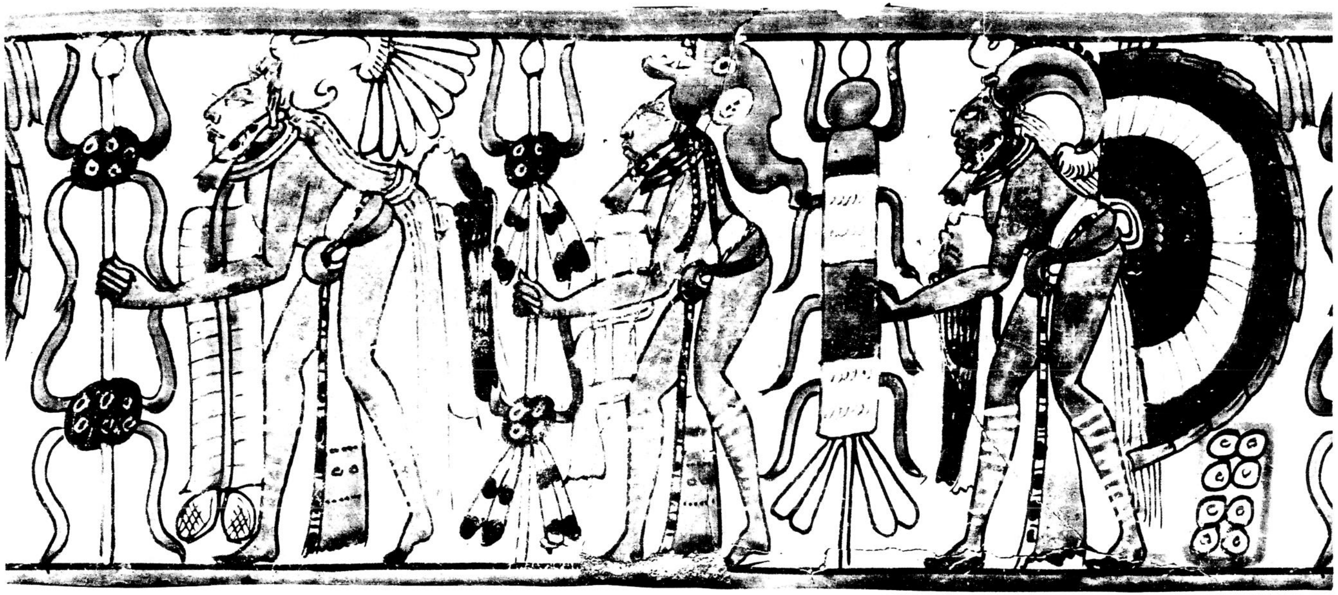
walled; this one is convex), shows members of the "Pearlman" war party, two of whom hold staffs of the type carried by the sacrificial priest on the Kimbell vase; two figures have trophy heads like those on the Pearlman vase, and one figure holds a rectangular latticelike object, similar to one carried on the Pearlman vase. The warriors have painted, striped legs, and a plumed back-fan is worn by one figure on each vase.

Only on the Kimbell vase, which portrays the prisoner, do we see round shields. This leads us to assume that this is a different tribe of warriors, and that the staffs carried above the round shields and the plumed back-fan worn by one of these figures represent captured paraphernalia.

On the Pearlman and Museum of the American Indian vases, the artist shows the participants in a war party; on the Kimbell vase, he shows the capture and the outcome of the raid. The portrayal of closely matched objects, such as glyphic panels, bundles, hairdos, staffs, trophy heads, and body paint, all rendered in a cohesive and individualistic style of body and facial types, indicates that a single artist or small school is at work.

CONCLUSIONS

Many questions remain. How and in what form did the Maya artist learn the iconography? Did he have a drawing to copy, or perhaps a poem or song to memorize, which would describe the design, as is true with Persian rug weavers? Did he know what the glyphs meant? Was he literate? Was the painter a priest who had learned the iconog-



7.19 Fourth Group, vase. (Museum of the American Indian, Heye Foundation. Roll-out photograph copyright Justin Kerr, 1980.)

raphy from priest-teachers? Did the painting of the red band on the rim—the last step in the painting of the vase—symbolically smear the edge with blood and infuse the vase with sacredness? Was the vase so sacred that its preciousness accounted for ancient repairs?

We hope to roll out many more vases and to be able to study in depth the work of these artists.

ACKNOWLEDGMENT

We would like to thank Dr. Francis Robicsek for his help in making many of these vases accessible to us.

8

FRANCIS ROBICSEK AND
DONALD HALES

A Ceramic Codex Fragment: The Sacrifice of Xbalanque

The quest for Pre-Columbian Maya bark-paper codices is as old as Maya research. Four such codices are known to have survived: the Dresden, Madrid, Paris, and a fourth, which was exhibited at the Grolier Club in New York in 1971 and was later published by M. D. Coe (1973:no. 87 and 150–154).

At the Cuarta Mesa Redonda de Palenque in 1980, we gave a paper (see Robicsek and Hales 1981) in which we examined a series of vases in "codex style" (M. D. Coe 1973, 1978; Crocker n.d.a, n.d.b), which depicted in continuity scenes from a particular myth. Since the presentation of that paper, we have further refined our hypothesis and uncovered additional data on over three hundred vases. These suggest not only that scenes on Late Classic Maya vases represent continuing stories but also that these thematic continuities occur in other styles (painted or carved) besides that termed "codex style."

As the result of our analysis, we were able to assemble a series of type themes, or "codex fragments," painted in an apparent iconographic sequence. One of these type themes, the Sacrifice of Xbalanque, is presented here. This fragment of a continuing story is perhaps the most intriguing of those we have encountered and attempted to reconstruct. The story involves four principal participants—Hunahpu (GI), Xbalanque (GIII), 1 Death (Black-faced Skull), and 7 Death (White-faced Skull)—and takes place in the Maya Underworld, Xibalba, as described in the *Popol Vuh*, following the temporary demise and defeat of the Hero Twins, Hunahpu and Xbalanque.

> When they were actually asked
> What should happen to their bones;
> When they were conjured by those of Hell.
> Their bones were ground up
> And strewn out along the river,
> But they didn't go very far.
> They just sank at once below the water.
> They became handsome sons,

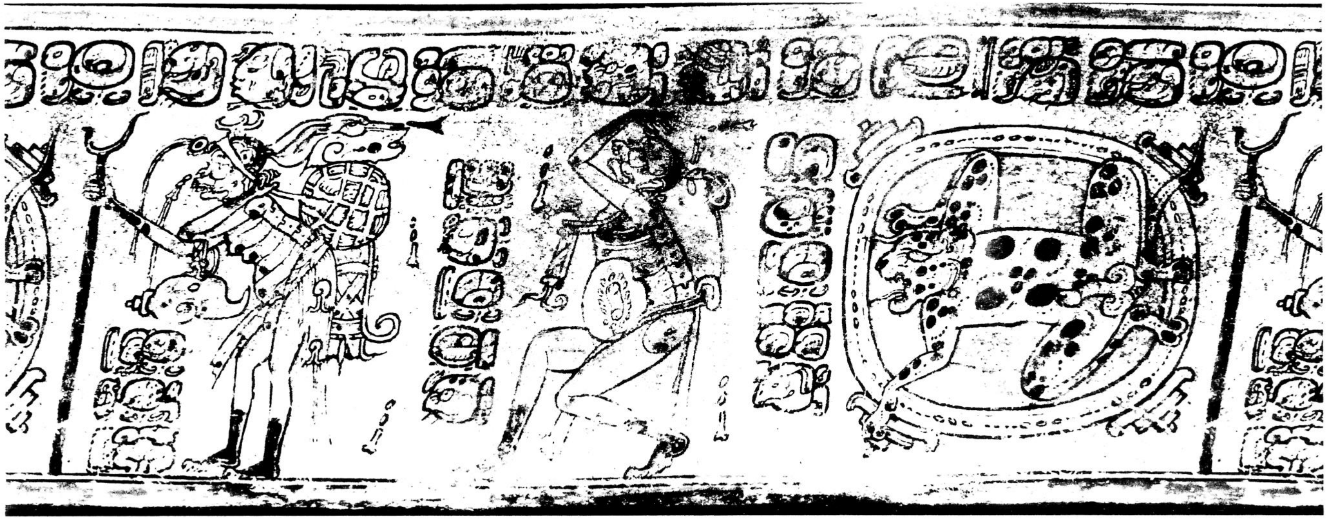
And actually their faces came out
And they reappeared.
(Edmonson 1971:lines 4242–4251)

The Hero Twins, after suffering defeat (death) at the hands of the Lords of Xibalba, were conjured or turned into bones by Skull-Staff and Bone-Staff.

And then there is the lord Bone-Staff
 And Skull-Staff,
The staff bearers of Hell,
 Whose staffs are just bones.
So they are their staff bearers,
 Who turn people to bone,
Really into bones
 And skulls again.
(ibid. :lines 1799–1806)

Figure 8.1 portrays, we believe, Skull-Staff and Bone-Staff (at the left) throwing bones over their shoulders toward a fat Waterlily Jaguar, which rests upon a glyphic field of water. Jaguars, like most large felines, are excellent swimmers, but why are

8.1 Late Classic Maya vase. Height, 14.2cm; diameter, 10.2cm. (The November Collection, Ltd. Roll-out photograph copyright Justin Kerr, 1978.)



Skull-Staff and Bone-Staff strewing bones toward the water and the jaguar? The third trial of Hunahpu and Xbalanque in Xibalba establishes the diet of jaguars as bones.

And so they went back to the House of Jaguars.
    There were crowds of jaguars in Jaguar House.
"Don't eat us.
    There will be something that belongs to you,"
      the jaguars were told.
And so then they dumped bones before the beasts,
    And so then they warred there over the bones.
"Now they are finished;
    Now they are eating their hearts,
And that means that they have been beaten.
    Those are their bones that are being eaten,"
Said the watchman.
    All their hearts were glad over it.
But they didn't die;
    Rather they were just fine.
They came back
    From the House of Jaguars.
"And what kind of people are these?
    And where did they come from?"
Said all those
    Of Hell.

(ibid.:lines 3901–3920)

The Waterlily Jaguar is not mentioned as a Lord of Xibalba in the *Popol Vuh*, but it is perhaps an aspect of Bloody Claws (Ix K'aq), "the prognostication in the Books of Chilam Balam for the day *Ix*, jaguar day, namely, 'jaguar, bloody mouth and claws, flesh eater, killer of men' " (Barrera Vásquez 1943).

Following their aquatic interment by Skull-Staff and Bone-Staff, the Hero Twins, Hunahpu and Xbalanque, reemerged from the water as handsome Young Lords or as fishmen of the Palenque Triad of gods.

And on the fifth day they appeared again.
They were seen in the water by the people.
    The two of them just looked like men fish.

(Edmonson 1971:lines 4252–4254)

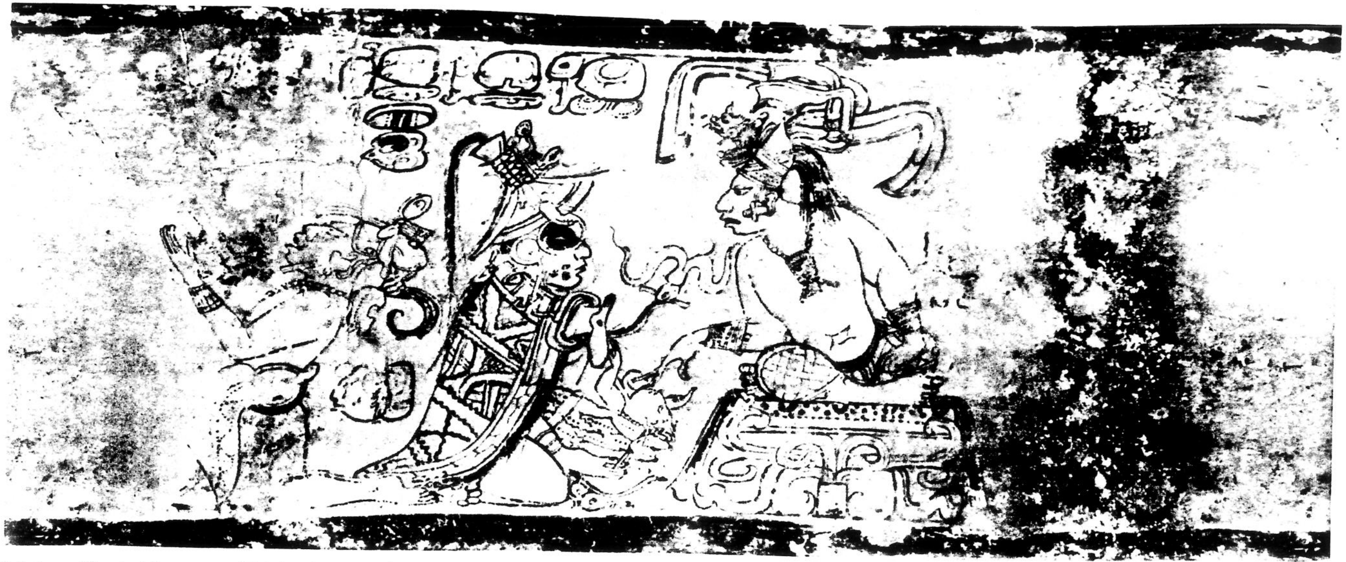
Their reemergence from water is perhaps best documented on several Chochola- and Maxcanu-style carved and modeled bowls (M. D. Coe 1973:nos. 59–61, 1975:no. 5) from the Yucatan Peninsula in Mexico. In addition, there are two modeled Chochola vases that portray Young Lords inside water cartouches, which, in turn, are within long-bone cartouches, from the latter ends of which emerge Waterlily Jaguars (Tate 1985).

After their return to life and reemergence from water as Young Lords (rendered in the Chochola–Maxcanu tradition) and fishmen (on the Tikal Bones, 51A and 51B, which portray GI in the water and fishing from a canoe), they appeared again in Xibalba disguised as beggars dancing and performing feats of magic. As magicians, they burned down houses and miraculously made them reappear intact and undamaged. Because they were observed by the inhabitants of Xibalba, word quickly spread to the ruling house of Xibalba and its lords, 1 Death and 7 Death. The disguised Twins were then summoned before the ruling house, where they danced the "Weasel," "Screech Owl," and "Armadillo." Then they sacrificed a dog belonging to one of the lords and brought it back to life; they burned down the house of 1 Death, but all the lords that were seated within it remained unharmed. Finally, after the twins sacrificed a man and brought him back to life, the lords marveled incredulously and said,

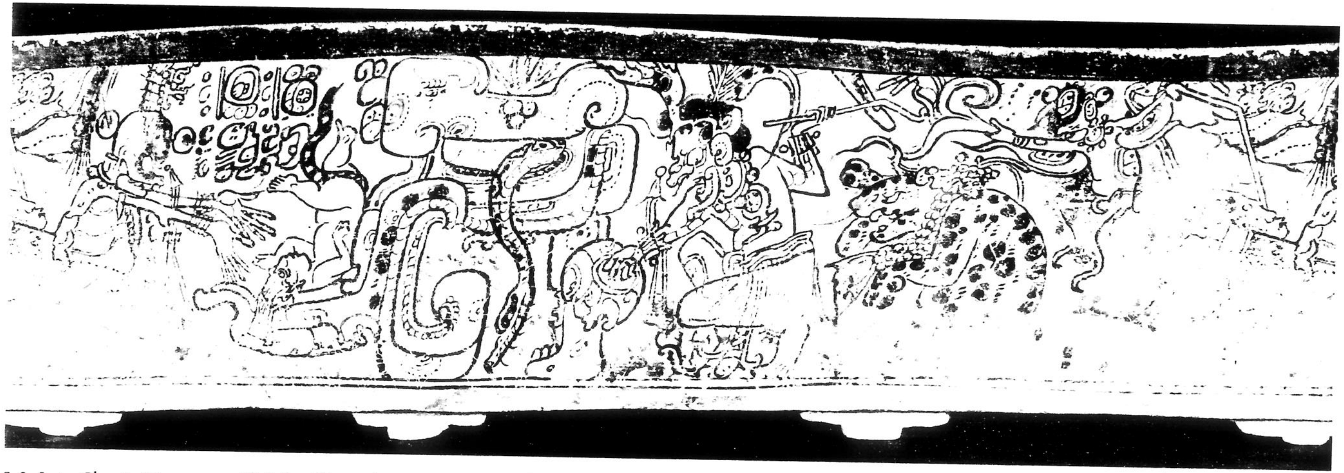
> "And now sacrifice yourselves in turn,
>   So we can see it.
> Truly our hearts are delighted with this dance of yours,"
>   The lords repeated.
> "Very well, oh lord,"
>   They said to them.
> And so then they sacrificed themselves.
> (Edmonson 1971:lines 4433–4439)

Lounsbury (1985) has presented evidence that the Hero Twins of the *Popol Vuh* are GI (Hunahpu) and GIII (Xbalanque) of the Palenque Triad of gods. Where do we see GI (Hunahpu) and GIII (Xbalanque) dancing? On the Metropolitan Museum of Art codex-style vases (figs. 8.5, 8.11), on a vase in the Kimbell Art Museum in Fort Worth, Texas (fig. 8.15); and on several vases now in private collections (figs. 8.3, 8.4, 8.6–8.9, 8.12, and 8.13). M. D. Coe (1978:34; see also 1973:98–99) has identified the scene in figure 8.5 as involving "six Underworld gods in some kind of sacrificial dance." Along with Lounsbury (1985) and Linda Schele (personal communications, 1978, 1981), we believe it to be the sacrificial dance of the Hero Twins, Hunahpu and Xbalanque, performed before 1 Death and 7 Death. Apparently, the train of events continues in the scenes in figures 8.2–8.11 and 8.13, in which the same principal characters, Hunahpu (GI), Xbalanque (GIII), 1 Death (Black-faced Skull), and 7 Death (White-faced Skull)—participate. In this context, they undergo "transformation from anthropomorphic to zoomorphic, from fleshed to skeletal, and from young to aged states" (Schele 1979c:407), though they always maintain easily recognizable features.

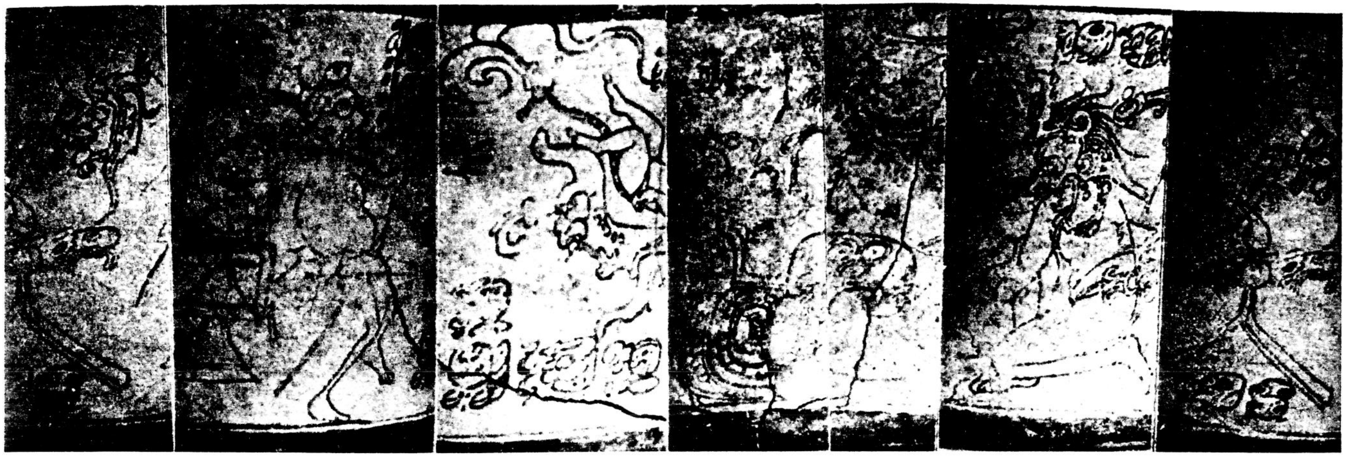
God GI of the Palenque Triad, whose origins date back to the Late Preclassic pe-



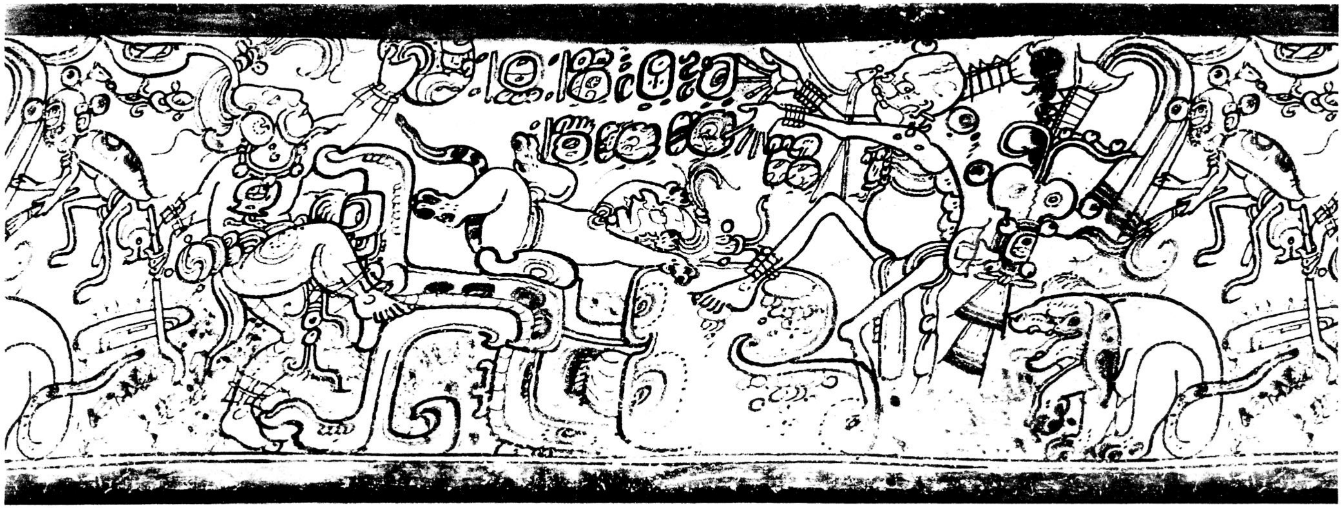
8.2 Late Classic Maya vase. Height, 21.7cm; diameter, 13.8cm. (Private collection. Roll-out photograph copyright Justin Kerr, 1981.)



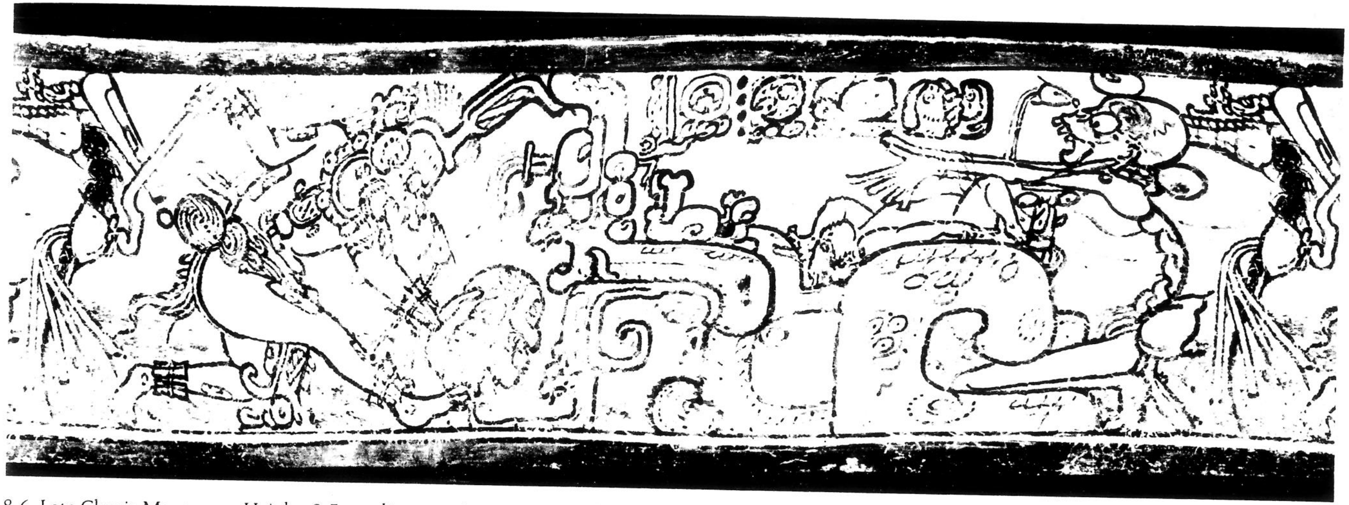
8.3 Late Classic Maya vase. Height, 12cm; diameter, 13cm. (The November Collection, Ltd. Roll-out photograph copyright Justin Kerr, 1979.)



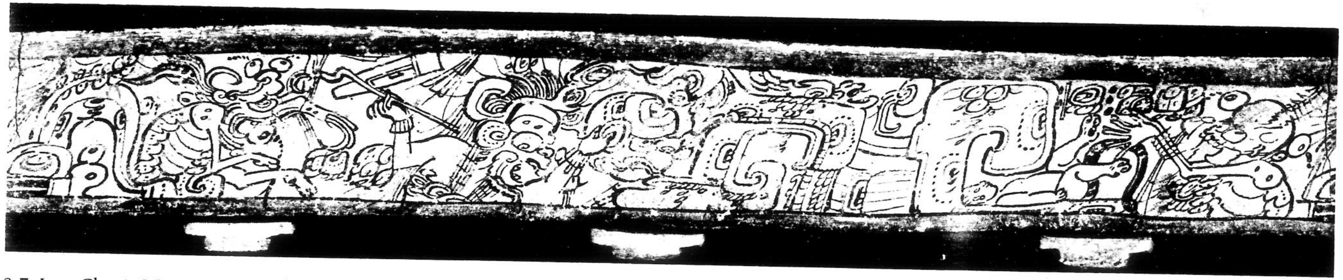
8.4 Late Classic Maya vase. (Composite photo assembled by the authors.)



8.5 Late Classic Maya vase. Height, 16.3cm; diameter, 10cm. (The Metropolitan Museum of Art, The Michael C. Rockefeller Memorial Collection of Primitive Art. Roll-out photograph copyright Justin Kerr, 1973.)



8.6 Late Classic Maya vase. Height, 9.5cm; diameter, 9cm. (Private collection. Roll-out photograph copyright Justin Kerr, 1980.)



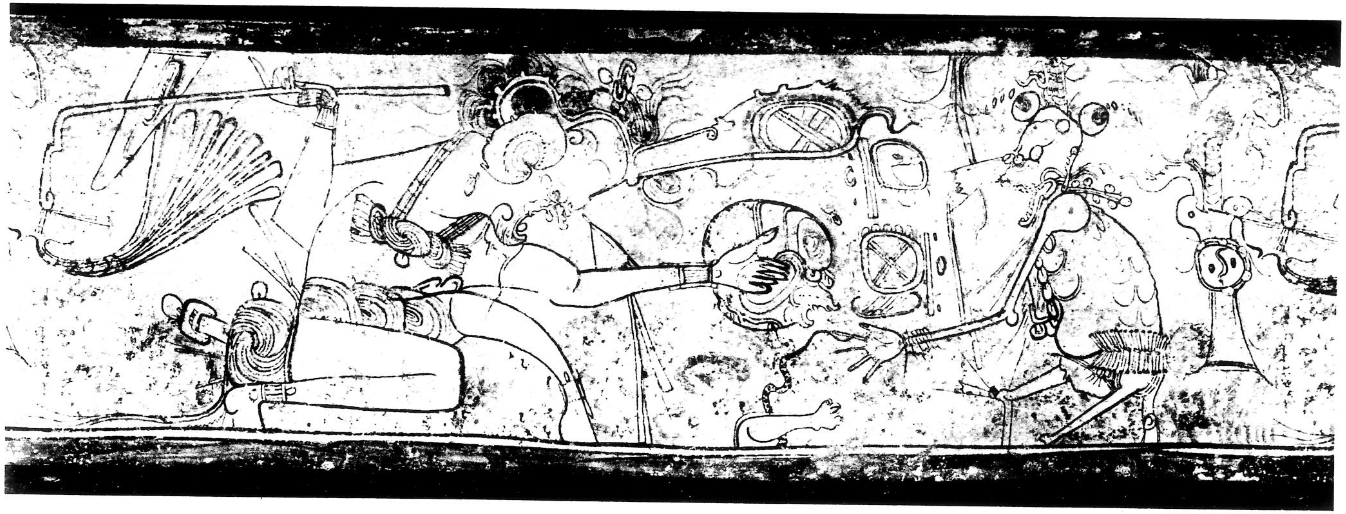
8.7 Late Classic Maya vase. Height, 8.5 cm; diameter, 9cm. (Private collection. Roll-out photograph copyright Justin Kerr, 1981.)

riod, is identified on these vases by his large scroll eye, aquiline nose, shark- or stingray-spine front tooth (David Joralemon, personal communication, 1981), fish barbel at the corner of the mouth, and a *Spondylus* (Thorny Oyster) shell over the ear. Most of his appearances on these vases are in full figure, and, as on the Dumbarton Oaks Palenque panel (Coe and Benson 1966; Schele 1980 and this volume), he is further recognized by his typical dancing posture, a shell crown infixed with crossed bands (T552), a hank of long hair tied up in a band, a collar studded with disembodied eyes, and an inverted vase (or pectoral?) whose infixes include either *akbal* (T504) or *cimi* (T509). He is shown wielding a hafted axe with a mirror or *nen* infix (T24)—as opposed to the hafted flint axe of 1 Death (see fig. 8.3)—and an eccentric flint, which, M. D. Coe (1973:98, 1978: 34) has suggested, represents the head of God C. We believe, however, that it is an eccentric flint infixed with the personified version of *cauac* (T528), as indicated by the grapelike motif.

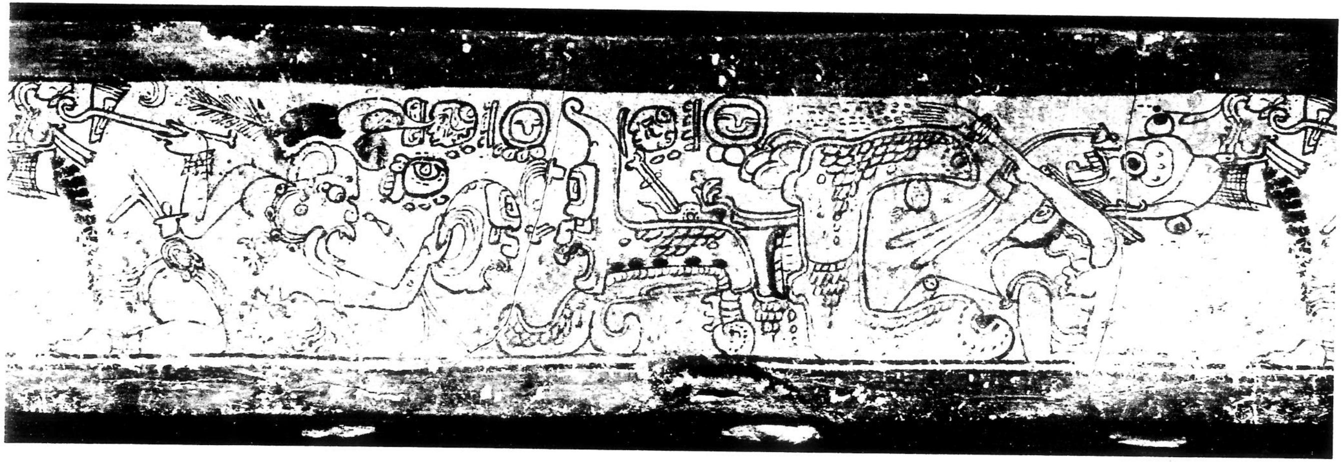
GIII of the Palenque Triad, whose origins can also be traced back to the Late Preclassic period, is on these vases identified in his infantile version by his large scroll eyes; aquiline nose; shark or stingray-spine front tooth (David Joralemon, personal communication, 1981); a "cruller" that starts above his jaguar ears, loops, goes around his nose, and loops in a cruller shape over his nose bridge; long hair tied up in a hank; jaguar ears, paws (hands and feet) and tail; and string knots for the belt and necklace. In his final zoomorphic transformation, it is possible that GIII may appear as the Waterlily Jaguar with a sacrificial scarf (identified by Hellmuth, personal communication) and a waterlily stalk atop his forehead (fig. 8.11). It is also possible that the Waterlily Jaguar is a creature, entirely unrelated to GIII, who is about to be sacrificed (David Joralemon, personal communication, 1981).

1 Death and 7 Death are primarily distinguished by the color of their skulls: black, 1 Death (named on fig. 8.12 as Hun-Cimi, U-Balaan-Ahau, Ah Uinic), and white, 7 Death. As "Death," both are recognizable by their skeletal state. They are also identified by a long black hank of hair coiled in bow tie–like knots bound at the front with the Jester God; by disembodied eyes affixed to their skulls and appended to their collars, to which may also be attached a *cimi* (T509) pendant; and by a loincloth, tied at the front with a rosette-like object, which is tied at the sides with protruding quill-like points to the rear, intertwined cloth. The weapons they carry include a trident eccentric flint (Robicsek 1977); a black, two-hooked lance; and a hafted eccentric-flint axe akin to the one held by GI on the Dumbarton Oaks Palenque panel (Coe and Benson 1966).

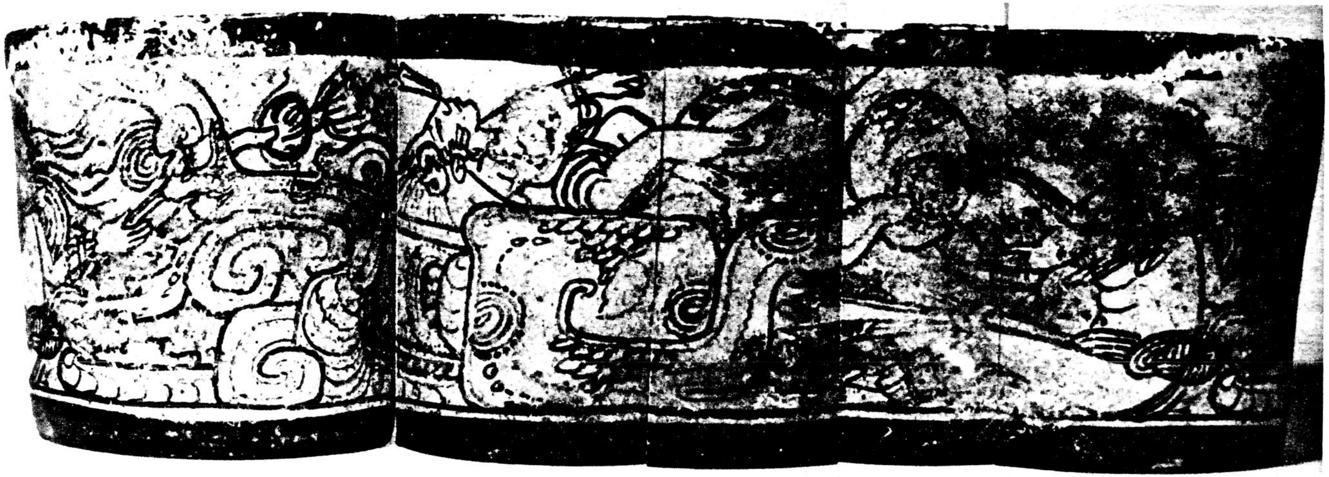
In addition to the four principal characters in the story, there is an assortment of secondary participants, two of whom may be recalled from earlier encounters with the Hero Twins in Xibalba. The first and most consistent of these is what M. D. Coe (1978:34) has "previously identified as a firefly holding a cigar. This is an allusion to the incident in the *Popol Vuh* in which the Hero Twins attach fireflies to their cigars in the House of Darkness so as to fool the Lords of Xibalba." This flying creature, which is wearing what looks like a motorcycle helmet, appears on figures 8.3–8.5, not sitting on the end of a cigar (or a flare) but holding one. He is seen on another codex-style vase (Coe 1973:no. 44) as an executioner, probably of the father of the Twins, Hun-Hunahpu, whose head was hung on a calabash tree by the Lords of Xibalba. On a polychrome bowl painted by the Altar de Sacrificios artist, his head is worn atop that of the protagonist in a final scene, which graphically portrays the bloodletting rite of penis perforation.



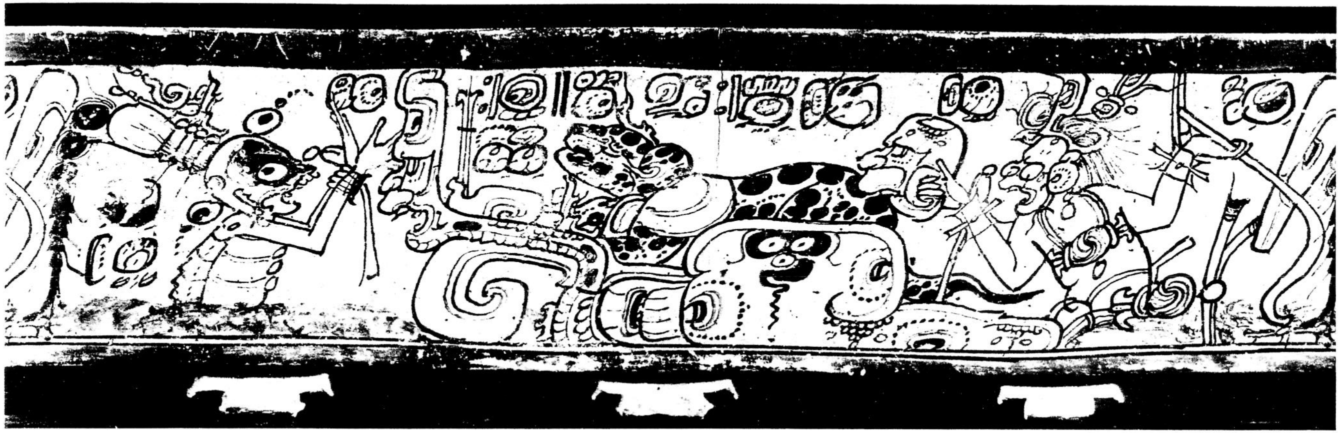
8.8 Late Classic Maya vase. Height, 16.8cm; diameter, 15cm. (Private collection. Roll-out photograph copyright Justin Kerr, 1981.)



8.9 Late Classic Maya vase. (Private collection. Roll-out photograph copyright Justin Kerr, 1981.)



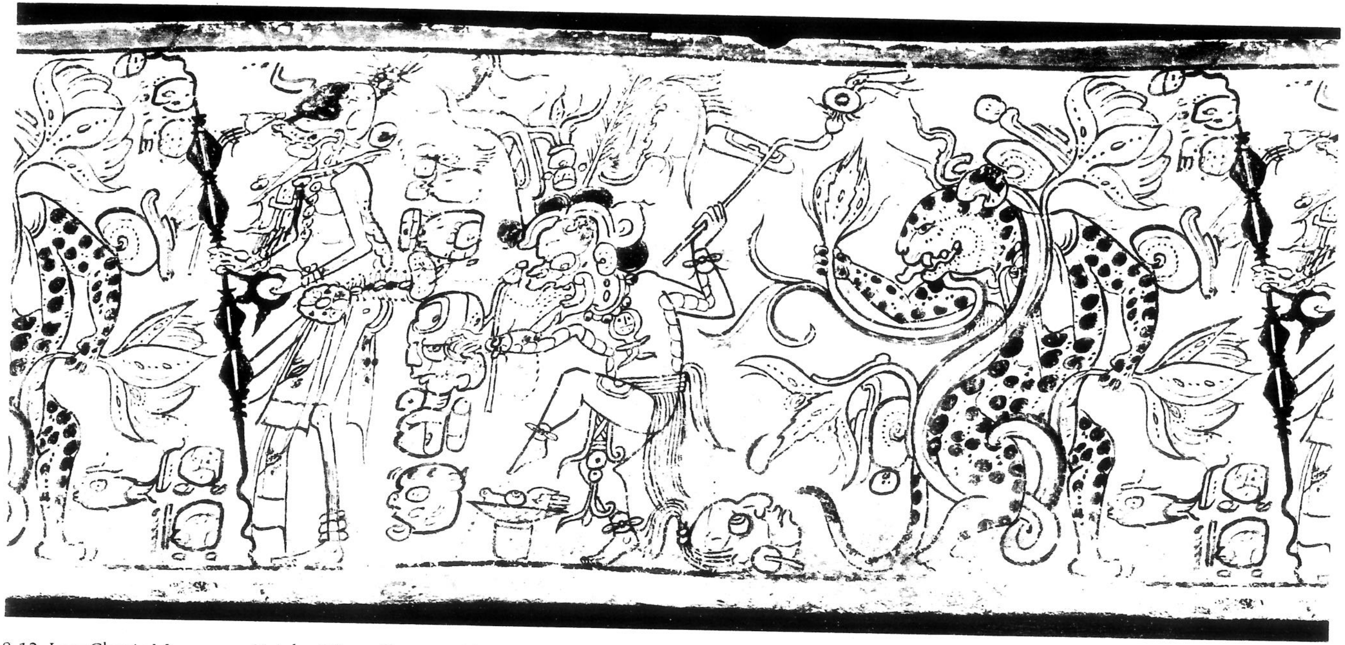
8.10 Late Classic Maya vase. (Composite photograph courtesy of Nicholas M. Hellmuth, Foundation for Latin American Anthropological Research; copyright Nicholas M. Hellmuth, 1981.)



8.11 Late Classic Maya vase. Height, 10.5cm; diameter, 12.3cm. (The Metropolitan Museum of Art. Roll-out photograph copyright Justin Kerr, 1980.)

The Jaguar Dog, identified by M. D. Coe (1973:98, 1978:34), is the only canine feline in existence (if only in the imagination). It appears in the scene in figure 8.5 of this ceramic sequence. It is likely that the Jaguar Dog is a full-figure personification of the month *Kankin* (see the Chinikiha Throne, B1), as Linda Schele (personal communications, 1978, 1981) has suggested. In the scene in figure 8.3, which is nearly identical to that in figure 8.5, the Jaguar Dog is replaced by a Waterlily Jaguar wearing what Nicholas Hellmuth (personal communication) has described as an "enema bib." We would tentatively suggest that the Jaguar Dog (or Kankin Dog) and the Waterlily Jaguar are different aspects or avatars of the same Underworld denizen.

Other characters are the skeletal jaguar-deer (fig. 8.7) and the Cauac Monster (Taylor 1979), upon which GIII (Xbalanque) is to be sacrificed by his brother, GI (Hunahpu). The monster appears on its side in all but one instance (fig. 8.3), where it is portrayed in an upright position. In most instances (figs. 8.4–8.7, 8.9–8.11, 8.13), the head of the Jester God rests upon the monster's nasal septum. In one case (fig. 8.6),



8.12 Late Classic Maya vase. Height, 20cm; diameter, 10.5cm. (Private collection. Roll-out photograph copyright Justin Kerr, 1980.)

GI, using a hafted axe, is tearing his eccentric flint (with its diagnostic personified *cauac* infix) from the main body of the Cauac Monster.

Having identified the participants on these vases, we must address the next questions: where and when? The *Popol Vuh* tells us that the event occurred in Xibalba, in the ruling house of its two principal lords, 1 Death and 7 Death. In an effort to determine a more precise locale, we should pay attention to the brown wash at the base of the tableaux presented (figs. 8.3–8.6, 8.8–8.11, 8.13); Lin Crocker (personal communication, 1980) suggests that the brown wash is interchangeable, iconically and glyphically, with water. Such a hypothesis is reinforced by the shells (glyphic ''water'') and fish affixed to the Waterlily Jaguar in figure 8.12. The possible existence of a ''watery western underworld'' has been suggested by M. D. Coe (n.d.) (see also Schele and M. E. Miller 1986:269–271). This notion is further substantiated at Palenque, where the ruler Chan-Bahlum II is posthumously portrayed in Temple XIV dancing on water before his deceased mother, who is about to present him with the effigy image of God K (see Schele, this volume).

Following the Tercera Mesa Redonda, Dieter Dütting suggested to Floyd Lounsbury and others who were present that the contemporary dates recorded on Palenque

8.13 Late Classic Maya vase. (Private collection. Roll-out photograph courtesy of Lin V. Crocker; copyright Lin V. Crocker, 1980.)

Temple XIV and the Dumbarton Oaks Palenque panel (Coe and Benson 1966:16–25) were posthumous to the two rulers portrayed on them. The contemporary date on Palenque Temple XIV (9 Ahau 3 Kankin, 9.13.13.15.0) is 1,355 days (3.13.15) after Chan-Bahlum II's death (which occurred on 6 Chicchan 3 Pop, 9.13.10.1.5), while the date on the Dumbarton Oaks panel is 832 days (2.5.12) after the accession of Xoc (the brother and successor of the portrayed Kan-Xul II; Xoc acceded on 9 Men 3 Yax, 9.14.8.14.15), which must be assumed to be after the death of Kan-Xul II. The event phrase recorded on Palenque Temple XIV (at B2 and D4) occurs on the majority of these vases (figs. 8.3, 8.5–8.7, 8.11, 8.13), with minor variations. Schele (this volume) has identified this event phrase as "the display or holding of God K," which occurs after the king dances as GI or GIII out of the Underworld following his rite of passage (which is partially recorded in the *Popol Vuh*) and is greeted by his parents, especially his mother, who gives him God K. Hence, the holding of God K is also recorded on these vases.

The text on the Metropolitan Museum of Art vase (fig. 8.5) records the event "the holding of God K," which occurred on 7 Muluc 7 Kayab to the ruler(?) "Vucub-x" whose birth is recorded on other codex-style vases. The Calendar Round date 7 Muluc 7 Kayab is also recorded on another vase (fig. 8.3) in conjunction with the same event, but without naming the protagonist, whom we assume was "Vucub-x," for the event and circumstances are identical. "Vucub-x" is mentioned on an eroded vase (fig. 8.13), but in association with the Calendar Round date 7 Cib 4 Kayab. Similarly, the date 7 Cib 4 Kayab occurs on an additional vase (fig. 8.6), but without mentioning the protagonist "Vucub-x." Finally, "Vucub-x" is named on yet another vase (fig. 8.11) in association with the problematic date 7 Muluc 10 Zac, and with the same verb and event depicted on the four preceding vases. It is puzzling that the same event, "the holding of God K," involving the same protagonist, is associated with three separate Calendar Round dates: 7 Muluc 7 Kayab, 7 Cib 4 Kayab, and 7 Muluc 10 Zac. Whatever the reason for this discrepancy in the dates, a historical ruler is named and portrayed in an archetypal scenario from the *Popol Vuh* as either Hunahpu (GI) or Xbalanque (GIII). Thus, mythology is shown as being directly associated with a historical event involving an actual ruler—in this context, now deceased.

The scenes in figures 8.1 through 8.7, and probably in figure 8.11 as well, depict the events leading up to the sacrifice of Xbalanque, or GIII, who is portrayed in different stages of transformation. Figure 8.8 presents the stunning climax of this mythological drama. Hunahpu (GI), having delivered the final blow with his hafted axe, and 7 Death are shown with their feet in the mire of the aquatic Underworld, looking intently at the small leg and jaguar tail of the disappearing infant, GIII. Figures 8.9 and 8.13 show a bare Cauac altar, devoid of GIII, who has disappeared into the mire of the aquatic Underworld. Having delivered the final decapitating blow to Xbalanque, Hunahpu may have been quoted as saying,

"Rise thou again," he said then,
    And suddenly his face revived.
Greatly they rejoiced,
    And the lords rejoiced similarly
That they had really done this.
    It gladdened the hearts
Of 1 Death
    And 7 Death
As though they had danced it
    And knew it.
And so then came desire
    And despair in the hearts of the lords
Over the dances of Hunter [Hunahpu]
    And Jaguar Deer [Xbalanque].
So then came the words of 1 Death
    And 7 Death,
"Do it to us!
    Sacrifice us!" they said then.
"Sacrifice us the same way,"
    Then said
1 Death
    And 7 Death
To Hunter [Hunahpu]
    And Jaguar Deer [Xbalanque].
        (Edmonson 1971:lines 4455–4478)

The thrilled and delighted Waterlily Jaguar and 1 Death join Hunahpu, GI, with the head of his brother Xbalanque, GIII, in the dance of death and decapitation (fig. 8.12), only to be defeated ultimately. The *Popol Vuh* records the final ascension of the Twins.

    Having completely conquered all of Hell.
And then they walked back up
    Here amid the light,
And at once
    They walked into the sky.
And one is the sun [Xbalanque],
    And the other is the moon [Hunahpu].
Then it grew light in the sky,
    And on the earth.
They are still in the sky,

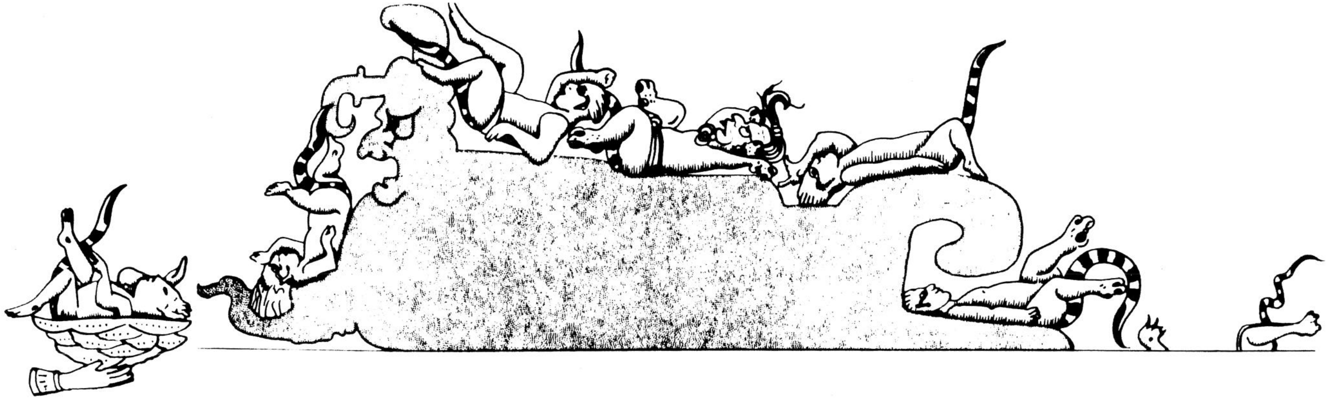
In fact there climbed also
The four hundred sons
Who had been killed by Alligator,
So now they became their companions;
They became the stars of the sky.
(Edmonson 1971:lines 4694–4708)

SEEKING another explanation for the events depicted in this "codex fragment," we observed a positional change in GIII across the Cauac Monster stone altar (figs. 8.3–8.7). GIII is first presented (fig. 8.2); then he is shown resting on the maxilla and nasal septum of the Cauac Monster (fig. 8.3); he then ascends and moves gradually across the upended profile of the monster (figs. 8.4, 8.5); then he reverses and descends near the cleft of the Cauac Monster's forehead (figs. 8.6, 8.7); and, finally, he descends into the aquatic Underworld mire (fig. 8.8). Figure 8.14 shows all the positional changes in relation to each other.

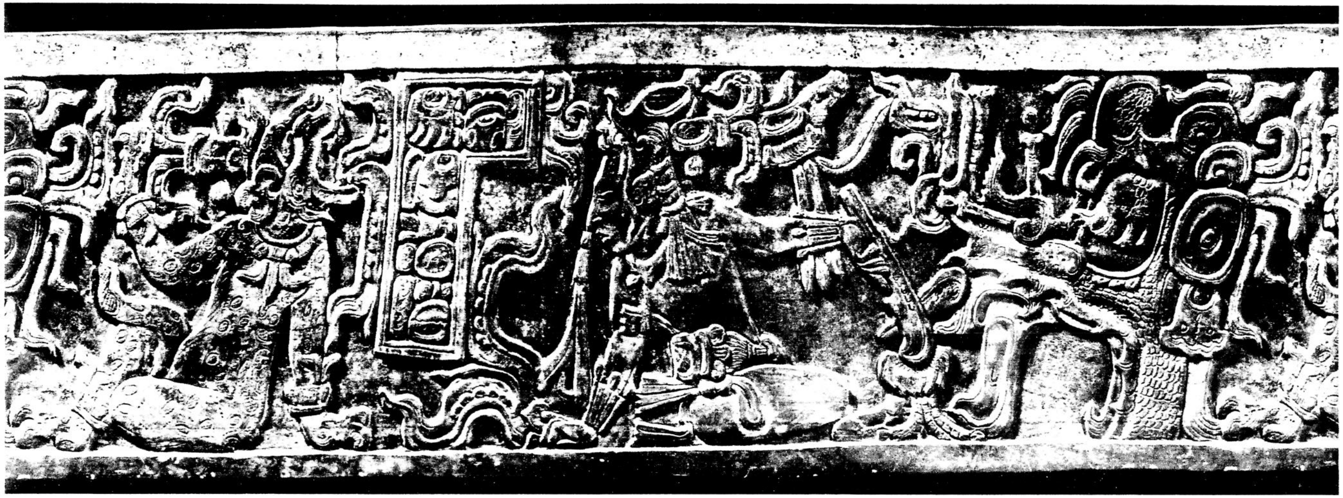
The ascent and descent of GIII (also known as the Night Sun) on these vases suggests an allegory of some observable phenomena. We suggest that these scenes depict the passage of the Night Sun (GIII, the infant Jaguar God), from its ascent, or "sunrise" in the Underworld sky, to its descent as a sacrificial Underworld "sunset." The demise (that is, the sacrifice) of the Night Sun at sunset in the Underworld, before the Lords of Xibalba, is the preamble to the apotheosis of the Hero Twins and their final ascension to the heavens.

But what is the Night Sun? The Maya were not aware that the world was round, or that the Sun was literally below them at night. Where did the Sun go at night? Into the Underworld of Xibalba. Where is Xibalba? In the *Diccionario Quiche-Español*, León (1954) glosses *xibal bey* as the 'Milky Way.' The Milky Way (*xibal bey*, Xibalba) is in the night sky, where one should find the Night Sun. Recently, at a lecture at the University of California at Los Angeles, Floyd Lounsbury proposed that the central shield (or medallion) of the Tablet of the Sun at Palenque, which portrays the Night Sun, is a representation of the planet Jupiter. If Lounsbury's working hypothesis is sound (which we believe it to be), then we are seeing an allegorical reference to the movement of Jupiter (the Night Sun, GIII) across the night sky of Xibalba (the Underworld, perhaps better called the Otherworld). The scenario ends with the setting and sacrifice of Jupiter, the Night Sun, into an aquatic mire, only to be reborn as the day Sun in apotheosis.

This presentation of vase depictions of the sacrifice of Xbalanque illustrates the theory that ancient Maya vase paintings can be arranged in a sequence and read as pages of a codex. These vases represent merely a fragment of a much larger mythological scenario that once must have been, as M. D. Coe (1978:13–14) has suggested, akin to "the Egyptian Book of the Dead or its Tibetan counterpart." Our investigations



8.14 Drawing illustrating the positional change of GIII (the infant Jaguar God, the Jaguar God of the Underworld, the Night Sun, Patron of the month *Uo*, and the God of Number Seven) across the Cauac Monster stone altar, as presented in figures 8.1–8.8. These positional changes may refer to the movement of the Night Sun (as an astral body) across the horizon.



8.15 Late Classic Maya vase. Height, 16.7cm; diameter, 17cm. (Photograph courtesy of the Kimbell Art Museum.)

into these type themes, or "codex fragments," as they occur on "codex-style" ceramics, may suggest that a highly abbreviated form of the Maya equivalent of the Book of the Dead was expressed on ceramics. These type themes appear to record specific highlights of various mythological incidents of major importance to the Classic Maya. Historical events involving known rulers are often recorded in conjunction with these mythological events. Here, the Maya may have been attempting to tie archetypal events in the mythological past to related historical events.

Naturally, we are aware that the present sequence inevitably may contain errors or omissions.

ADDENDUM

Since the presentation and completion of this paper, a carved vase (fig. 8.15), possibly of this type theme, has been brought to our attention. This vase, in the collection of the Kimbell Art Museum, Fort Worth, Texas, is reported to be from the region above the confluence of the Usumacinta and Pasión Rivers in Guatemala. It has recently been published by Schele and M. E. Miller (1986:287, pl. 116). A seated and partially reclining zoomorphic version of GIII, a Waterlily Jaguar, rests in front of an upright Cauac Monster stone altar (as in figure 8.11) and faces a block of five hieroglyphs. To the right of the glyph block, and turned to face GIII as a Waterlily Jaguar, is GI, who brandishes a hafted axe with waterlily fronds. The hieroglyphic text between Figures A and B may be transcribed as follows:

A1 501.125
B1 74:520.181 (verb)
A2 1.507a
A3 50var?.177.585a
A4 188.59.x.

9

Skyband Representations in Classic Maya Vase Painting

JOHN B. CARLSON

Ernst Förstemann's (1886:15–19) pioneering analysis of the hieroglyphic writing and calendrics in the Dresden Codex pointed out linear bands of symbols surrounded by rectangular boxes rather than by cartouches. His classification of these symbols contained the crossed-bands element and seven other primary signs, which he tentatively identified with the seven classical planets of antiquity. Though many of his identifications have proved to be unsupportable, subsequent work has established an identification of three signs with the glyphic symbols for Sun, Moon, and Venus, and a generally "celestial" iconographic context for the other elements as well as for the bands themselves. Descriptive terms such as "planetary band" and "celestial band" have come into general usage, but, for the purpose of the present study, the simpler designation "skyband" will be used.

The historical development of research on skybands was recently summarized by Carlson and Landis (1985). In that study, a catalogue of skyband representations shows that they may be found in three of the four surviving Postclassic Maya codices, in monumental sculpture, in various architectural contexts, and on ceramics. From those depictions, we can deduce that skybands decorated the costumes and ceremonial paraphernalia—thrones, belts, and loincloths—of the Maya elite and served as frames, borders, bases, and platforms. Skybands form the bodies of bicephalic dragons and related mythical beasts, which create a celestial canopy and become the bicephalic "ceremonial bar" held by Maya rulers.

Carlson and Landis conclude that the skyband in its many representations is iconographically the abbreviated body of the Maya bearded Bicephalic Dragon or a related beast. This "House of the Celestial Dragon—Itzam Na" becomes a cosmic border framing the Maya world; it may form the niche of emergence of the Maya dynast and, thus, of his hereditary line. The lid from the tomb of Lord Pacal of Palenque illustrates within a skyband frame the cosmic scene of death and probable apotheosis of the lord (ibid.:fig. 5). In his sarcophagus, Pacal was interred facing upward so that he could figuratively look up through the skyband frame on the lid toward the celestial realm.

The study cited above also suggests that the skyband elements, which function visually as the scales or segments of the ophidian form, are the symbolic attributes of this cosmological dragon, the companion Serpent Bird, and associated emergent deities, as well as the Sun, Moon, and Venus. The thirteen or so main elements, with their variants and transformational forms, also exhibit a strong association with many of the celestial patrons of months in the Maya 365-day solar year, as depicted in the Initial Series Introducing Glyph. Other work by Carlson (1982) has proposed that the Maya Skyband Dragon may be seen in a wider context of two-headed-dragon complexes, which span the Pacific basin from Asia to the Andean cultures of South America. This pervasive cosmological symbol, whether in the form of the Makara-rainbow dragons of Asia or the arching serpent forms found in Andean iconography, is related to the sky and specifically to the rain-bringing and fertility-producing aspects of the sky.

Skyband Representations on Maya Vases

Skybands are found on bowls, plates, and cylindrical polychrome vessels. Since the compilation of the catalogue of Carlson and Landis, additional important ceramic examples have been uncovered. The technique of roll-out photography developed by Justin Kerr now greatly facilitates the publication of cylindrical vases. The eight roll-out photographs illustrated here were chosen for their varied styles and iconographic content. They attest to the art of the photographer as well as to that of the Maya vase painter whose original conception decorates the cylindrical surface.

M. D. Coe (1973, 1975, 1978, 1982a) is a pioneer in the analysis and publication of Classic Maya vase painting. His initial hypothesis—that the brilliant Maya polychrome and codex-style ceramic vases are part of the mortuary furniture of elite burials, and that the scenes depicted relate to Maya funerary ritual and mythology—seems to have maintained its original vitality. Coe has further suggested that most, if not all, the scenes depicted take place in the Maya Underworld.

> The Maya version of Hell was Xibalba, "Place of Fright," which was inhabited by a host of sinister deities, often macabre and even terrifying, and presided over by two or possibly three divinities who ruled their realm from elaborate palaces. (M. D. Coe 1982a:10)

The *Popol Vuh*, the sacred book of the Quiche Maya, presents one of the few detailed accounts of Maya funerary mythology. In this legend, the Hero Twins descend to the lower levels of Xibalba and contend with the powerful Lords of the Underworld. The Twins survive the many ordeals with which they are beset, triumph over death itself, and in the end are transformed into the Sun and Moon (or perhaps the Sun and Venus).

> It is highly likely that this tale, which was known throughout the Maya area and even beyond, was a kind of paradigm for the Maya elite, who, although

> they would suffer death and the descent to Xibalbá like everybody else, would eventually triumph over the Underworld, and through apotheosis rise to the sky where their descendants and followers could worship them. (M. D. Coe 1982a:11)

This paradigm of Underworld scenes and themes of death, the afterlife, and apotheosis will provide our working hypothesis for assessing the role of skyband representations in these scenes.

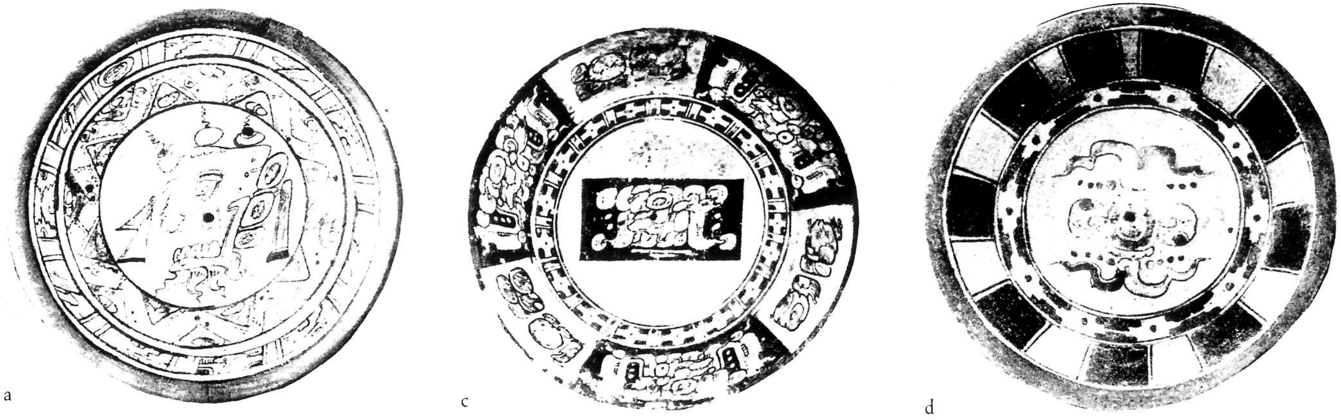
Plates and Bowls

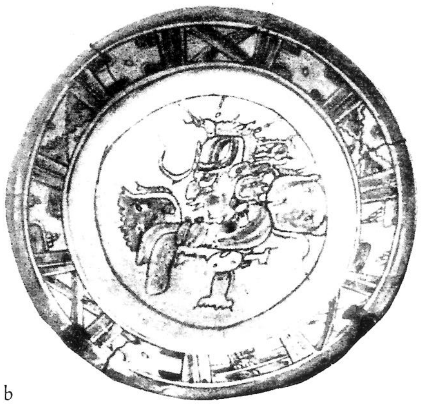
All these ceramic vessels are containers; they are boundaries between what is inside and what is out. Potters the world over have almost universally chosen to embellish the openings of their vessels with various decorative bands and sequences of elements around the rim area. From the iconographic analysis, it would follow that the placement of skybands around the rims of vases and on the inside or outside lips of plates and bowls is designed to create for the vessel a cosmological boundary like that provided by the heaven-spanning Skyband Dragon in the Maya belief system.

The cosmic-frame interpretation is reinforced by our current understanding of the mortuary purpose of the plates and shallow bowls, particularly those with "kill holes" in their centers (fig. 9.1). In his "Ideology of the Maya Tomb" (this volume), M. D. Coe notes that it appears to have been a common practice to place a "killed" bowl, inverted, over the head of the deceased, and perhaps another over the pelvic region. Coe theorizes that the bowl represented "the underside of the surface of the earth in a Mesoamerican cosmological scheme of thirteen heavens, the earth's surface, and nine underworlds." He also suggests that the bowl was pierced in order to release the soul of the deceased.

In figure 9.1a, a standard skyband inner rim is followed by a serpent-segment band, which is known to be closely related to the skyband (Carlson and Landis 1985). The death head painted in the center has a "kill hole." Figure 9.1b shows a standard skyband rim with the killed image of a solar-sacrificial deity, the Patron of Pax, who has a close association with the iconography of skybands and their elements, as well as with death and sacrifice. The Patron of Pax is shown also in figure 9.1c, in the center and on the border, with a *kan*-symbol band in between. The *kan* cross is one of the standard skyband elements, and this *kan* band is a variant of the true skyband. The remaining examples of figure 9.1 show fabulous creatures surrounded by decorative bands: *kan* crosses in 9.1d, unusual triangular (probably stylized serpent-segment) motifs in 9.1e, *kin* (Sun) elements and serpent band in 9.1f, and the "two-eyes" serpent-related motif in 9.1g (see Carlson and Landis 1985).

The bowls in figure 9.2 show an upper skyband, and the bowl in figure 9.3 has the standard skyband decoration both outside and in. Instead of the "kill hole" in the cen-



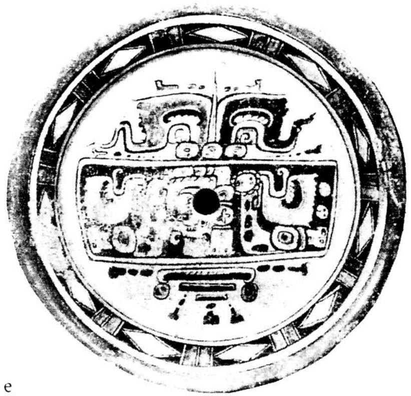


9.1 Interior views of seven Maya codex-style plates with skyband (or related decorative band) and "kill hole" in the center. (Courtesy of Francis Robicsek. See Robicsek and Hales 1981.)

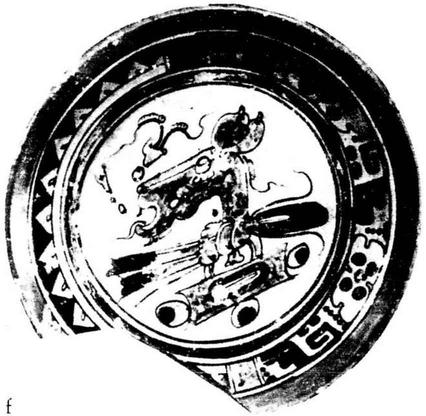
ter, however, there is a stylized circular motif with crossed-bands sky symbol inside. I would interpret this interior motif, placed over the upturned face of the deceased, as a symbolic view of the heavens seen from the Maya tomb. Would that this vessel had been reported in its archaeological context! The concept of a symbolic opening from the Underworld may be further supported by M. D. Coe's (this volume) interpretation of the painted capstone of Tikal Burial 116, the tomb of the celebrated Ruler A. Coe suggests that the large red spot painted on the underside of the stone performed the same function as the "kill holes," a place for the soul to exit upon its apotheosis. The so-called "psychoduct," a stone tube leading from the crypt of Lord Pacal's tomb up the stairway to the floor of the Temple of the Inscriptions at Palenque, is a concrete example of such an umbilical connection.

Cylindrical Vessels

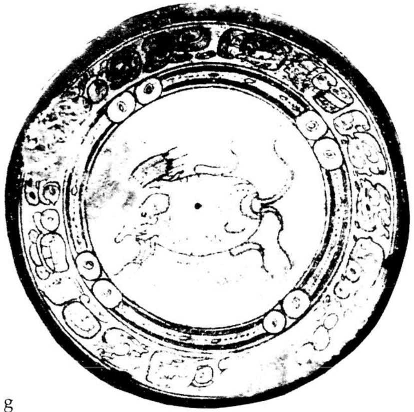
The cylindrical "codex-style" vases depicted in figures 9.4, 9.5, and 9.6 all possess skyband borders at the top rim and relatively simple depictions below. The skyband provides the upper celestial border, as is typical with skyband frames, canopies, and niches depicted in non-ceramic contexts. In these examples, *ahau* faces seem to be common elements, alternating with flint blades; *kan* crosses, the *imix* sign, and long-lipped figures are also shown, one of the latter with the crossed bands in a circular motif on the forehead. As in the other examples from plates and bowls, all the individual skyband elements may be recognized as one of the thirteen basic forms catalogued by Carlson and Landis (1985), although some of the variants are quite unusual.



e



f

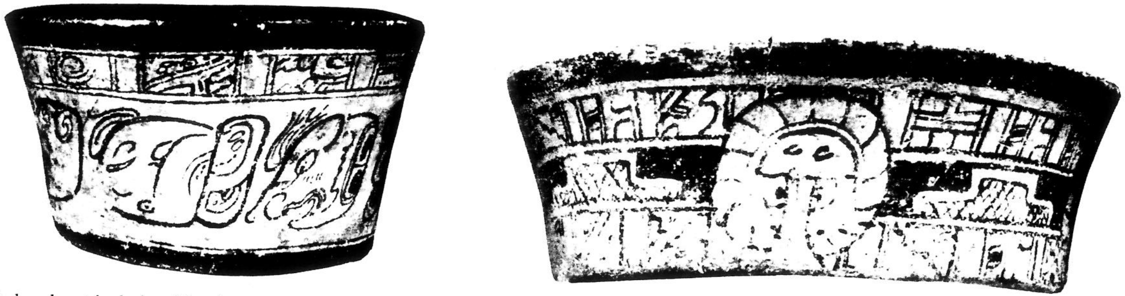


g

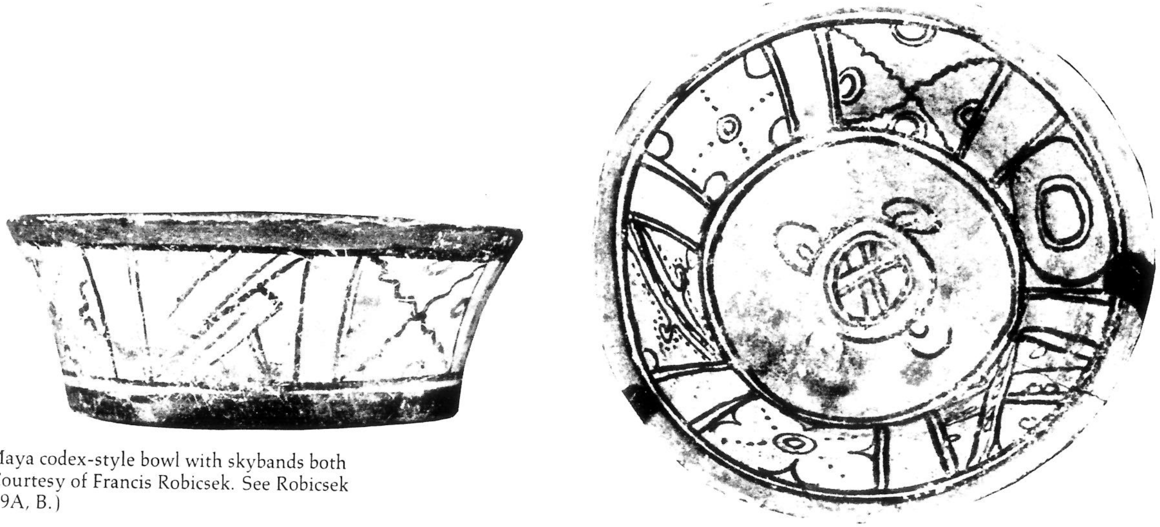
Figure 9.7 has a band of rather stylized glyphs where a portion of the Primary Standard text would usually appear. Below this, there is a skyband border, from which hangs a fringe with probable death-eye motifs. The main scene—two individuals conversing, one a lord on a jaguar-pelt throne—would now be interpreted as taking place in the Underworld.

The roll-out photograph in figure 9.8 again shows two Young Lords, both holding fans and sitting on jaguar pelts. Ritual bundles and offertory bowls are placed in front of them; the bowl on the left seems to contain a sacrificial perforating device. All these items appear to be standard elite ritual paraphernalia, and there is little here to indicate that this is necessarily an Underworld scene. I would tentatively suggest, however, that the upper skyband border may represent something more specific than the sky or celestial world. It is known that the upper vault of a Maya tomb, usually along the capstones of the corbel, were sometimes painted with a skyband, iconographically representing the sky. Let us explore two ideas: (1) that these upper skyband decorations on vases indicate specifically the capstone or upper vault of the tomb crypt and (2) that the scenes below them take place explicitly in the realm of the Underworld Lords.

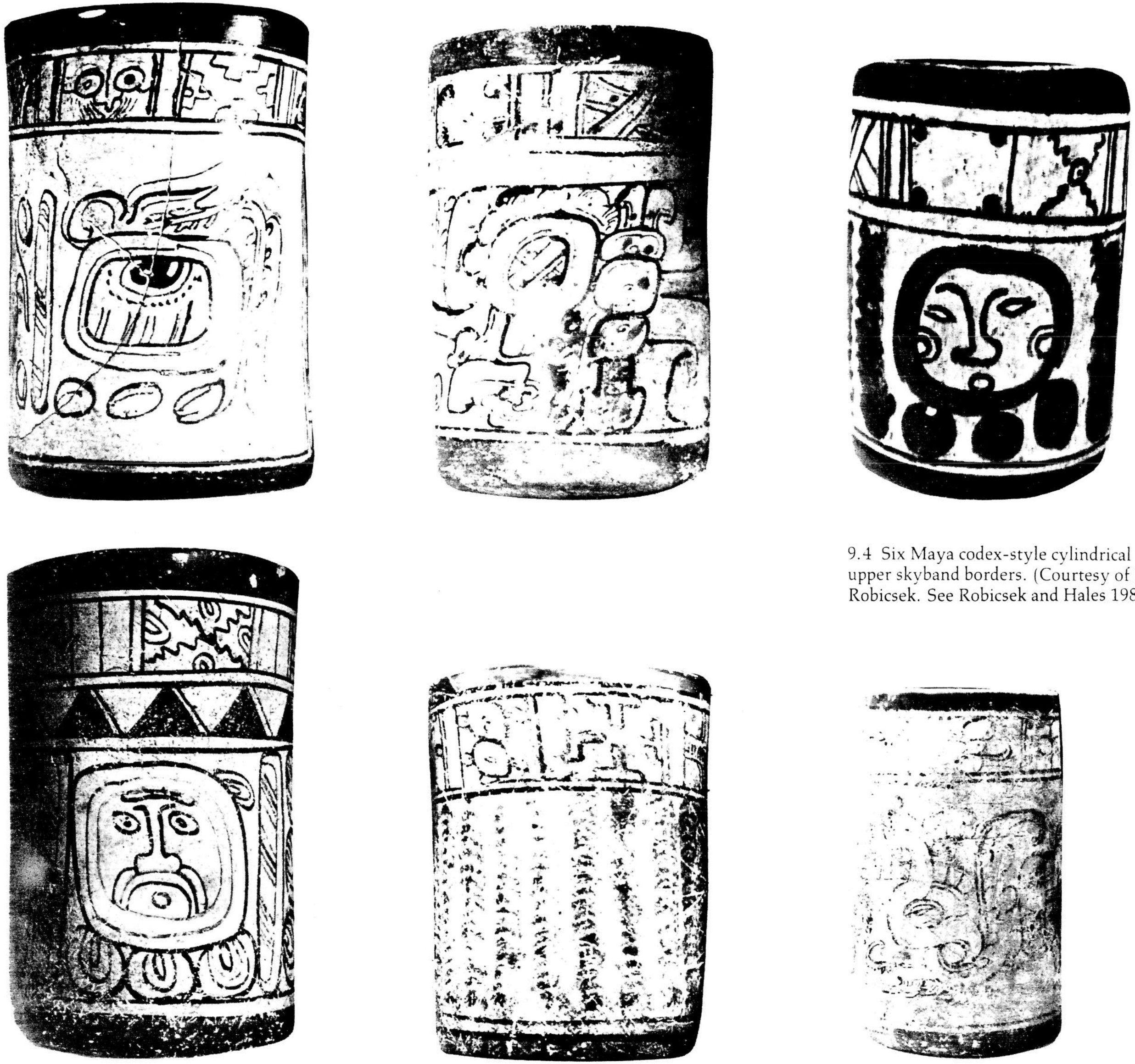
The roll-out photographs in figures 9.9, 9.10, and 9.11 show an upper skyband. Figures 9.10 and 9.11 have the Primary Standard Sequence text above (M. D. Coe 1973), and, in figure 9.11, there is an earth, or *caban*, band below the scene. Figure 9.9 shows two scribes with god markings writing in jaguar-skin-covered, open, serpent-jawed codex books with Maya numbers streaming out and behind them, leaves. We might speculate that these supernatural scribes are composing a Maya ''Book of the Dead'' (ibid.).



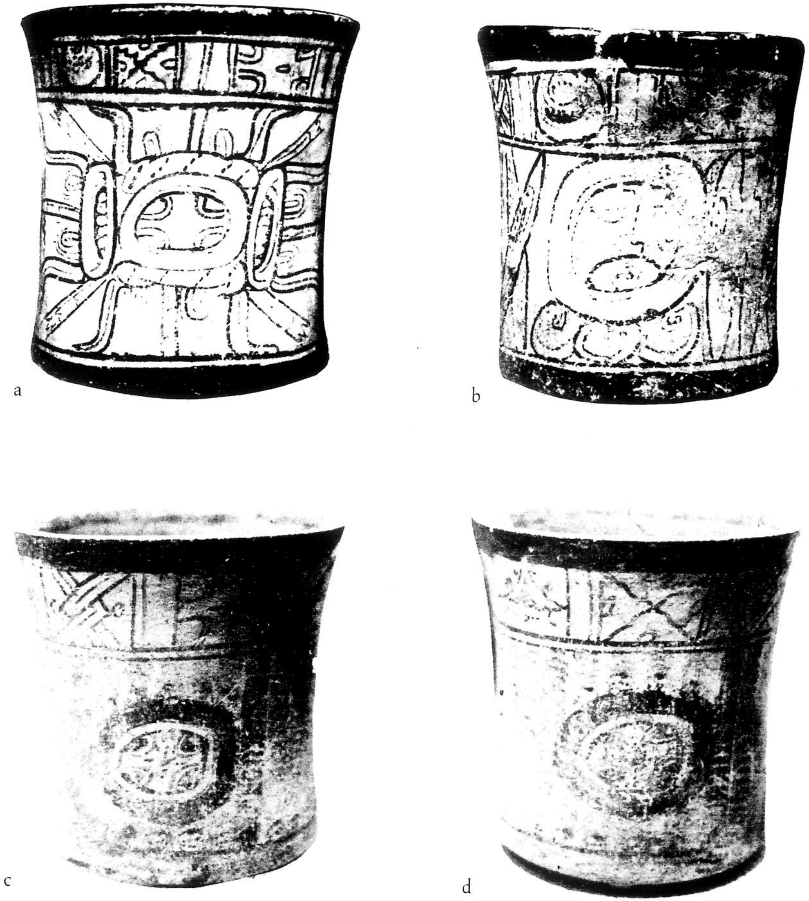
9.2 Two Maya codex-style bowls with skyband borders on top and on both the top and bottom edges, respectively. (Courtesy of Francis Robicsek. See Robicsek and Hales 1981.)



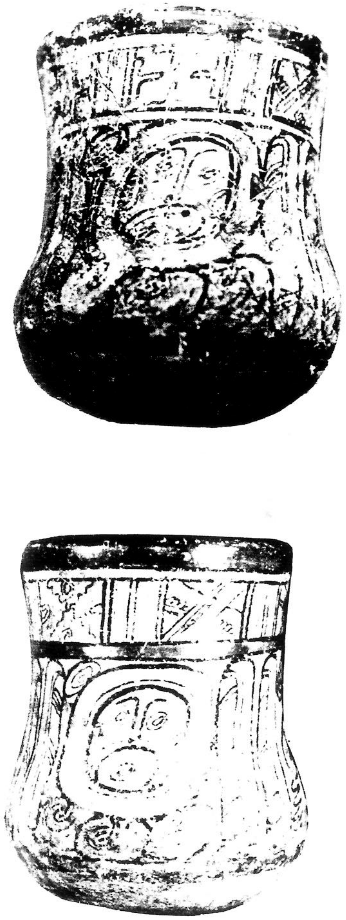
9.3 Two views of a Maya codex-style bowl with skybands both inside and outside. (Courtesy of Francis Robicsek. See Robicsek and Hales 1981:table 9A, B.)



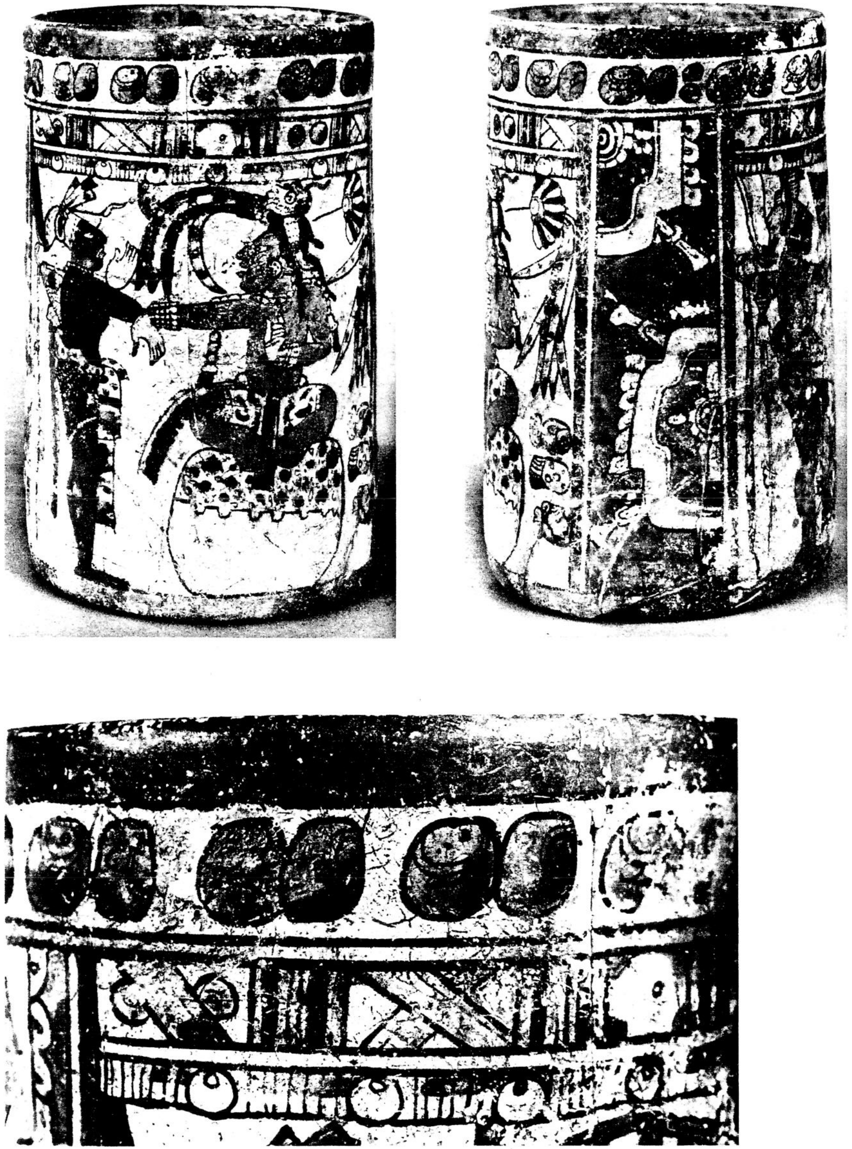
9.4 Six Maya codex-style cylindrical vases with upper skyband borders. (Courtesy of Francis Robicsek. See Robicsek and Hales 1981.)



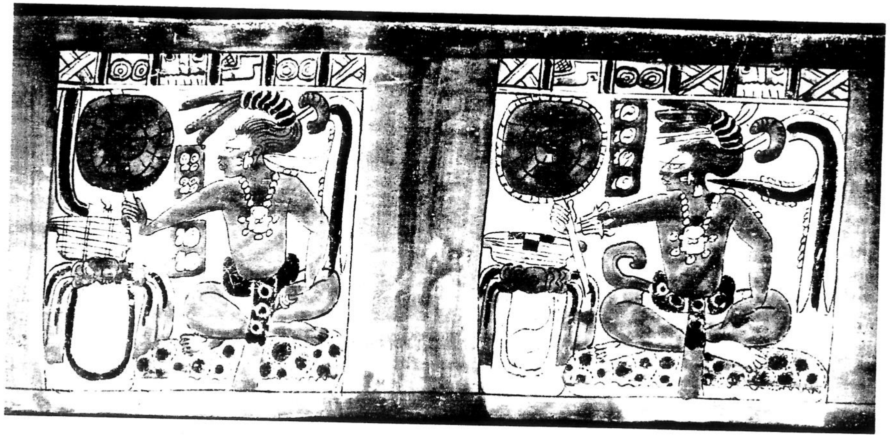
9.5 Three Maya codex-style flared cylindrical vases with upper skyband borders. a. Vase containing a prominent *kan* cross. b. Vase showing an *ahau* face. c. and d. Two views of a vessel with *kan* crosses. (Courtesy of Francis Robicsek. See Robicsek and Hales 1981.)



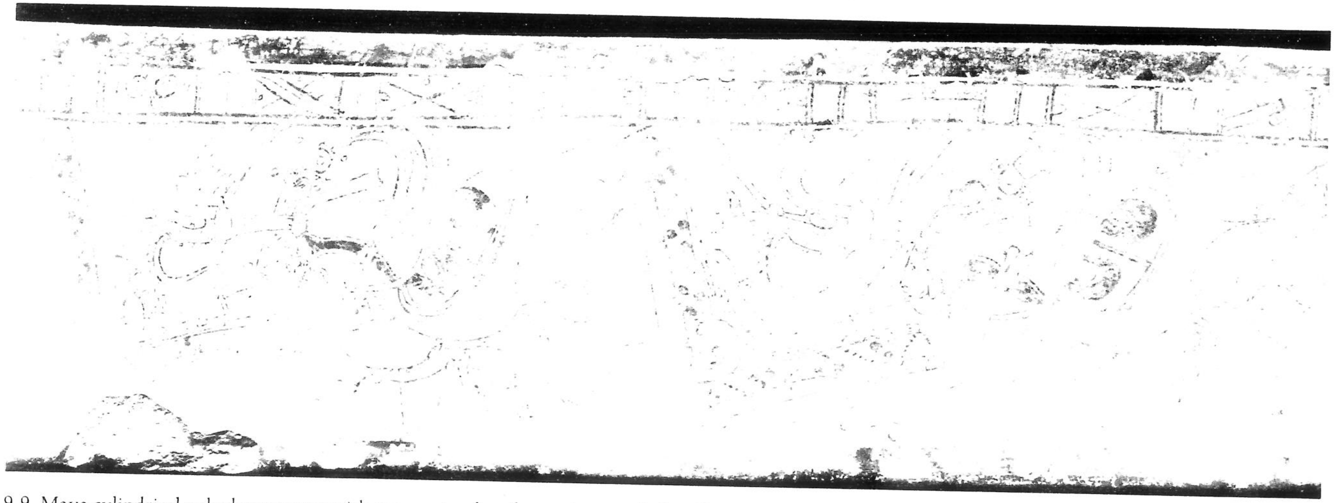
9.6 Two Maya codex-style bulging cylindrical vases with upper skyband borders and *ahau* faces. (Courtesy of Francis Robicsek. See Robicsek and Hales 1981: table 8B, E.)



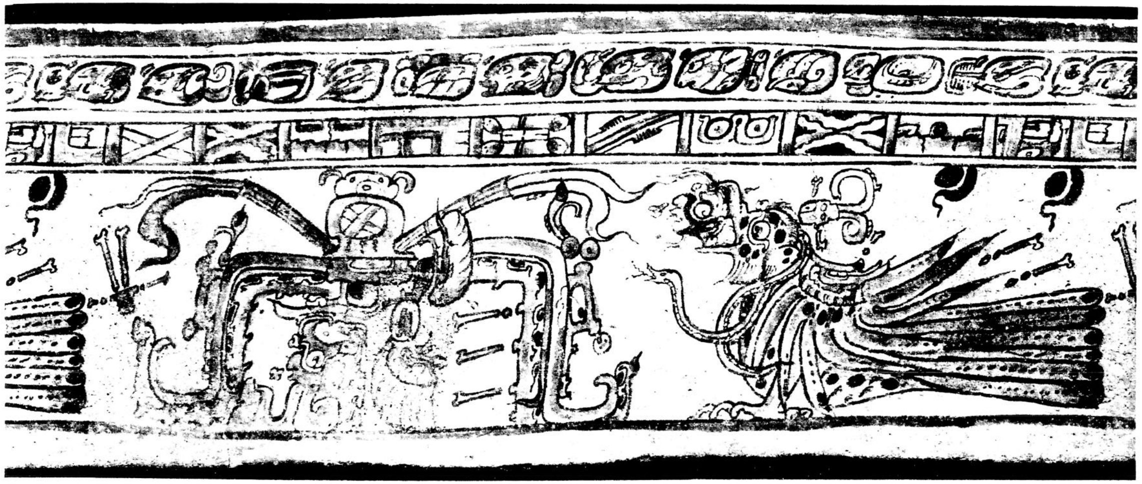
9.7 Two views and a detail of a Maya cylindrical polychrome vase with upper skyband border and death-eye fringe. (Courtesy of the Denver Art Museum.)



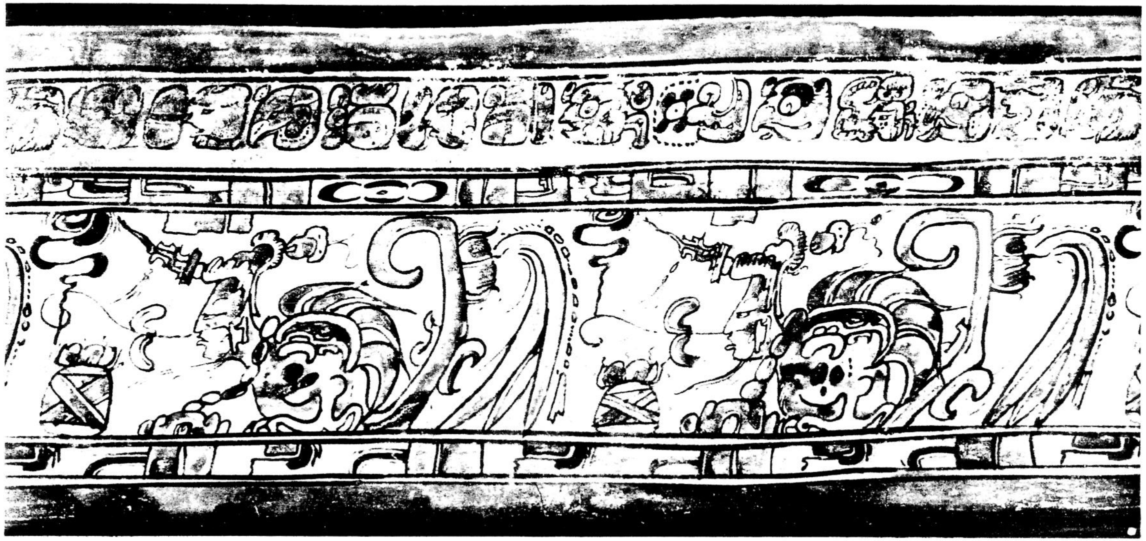
9.8 Codex-style Maya cylindrical vase with seated Young Lords and upper skyband border. (Roll-out photograph copyright Justin Kerr, 1981.)



9.9 Maya cylindrical polychrome vase with supernatural scribes and upper skyband border. (Roll-out photograph copyright Justin Kerr, 1981. See Robicsek and Hales 1981: vessel 61.)



9.10 Maya codex-style cylindrical vase with upper skyband border. (Roll-out photograph copyright Justin Kerr, 1981. See Robicsek and Hales 1981:vessel 168; M. D. Coe 1982a:no. 65.)



9.11 Maya codex-style cylindrical vase with upper skyband and lower *caban*-band borders. (Roll-out photograph copyright Justin Kerr, 1981. See Robicsek and Hales 1981:vessel 170.)

The scene in figure 9.10, described by M. D. Coe (1982a:42–43), shows a spotted Muan/Serpent Bird, which holds "the severed head of the Jaguar God of the Underworld in its beak." The more complex figure to the left has been described in detail by Coe. Placed atop the central deity head is an inverted vessel with crossed bands on the side (on its bottom?) with "fore-and-aft extensions in the form of snake bodies covered with *caban* (earth) signs." The placement of these *caban* signs, along with those pendant from the skyband (seen at the right, above the Muan Bird), strongly suggests that "the entire scene takes place beneath the earth's surface, in the Underworld" (ibid.).

Figure 9.11 shows a scene composed of two anthropomorphized Muan/Serpent Birds with the *caban* band below and skyband above—a typical arrangement for a scene placed on the surface of the Earth. The skyband is composed of Sun God variant profile faces (with T-shaped tooth, "monkey-curl nose," crossed eye, and mirror in forehead) alternating with unusual four-petaled *kin*, 'Sun,' symbols. In this case, however, the skyband, significantly, also has pendant *caban* signs, virtually assuring the Underworld character of the scene.

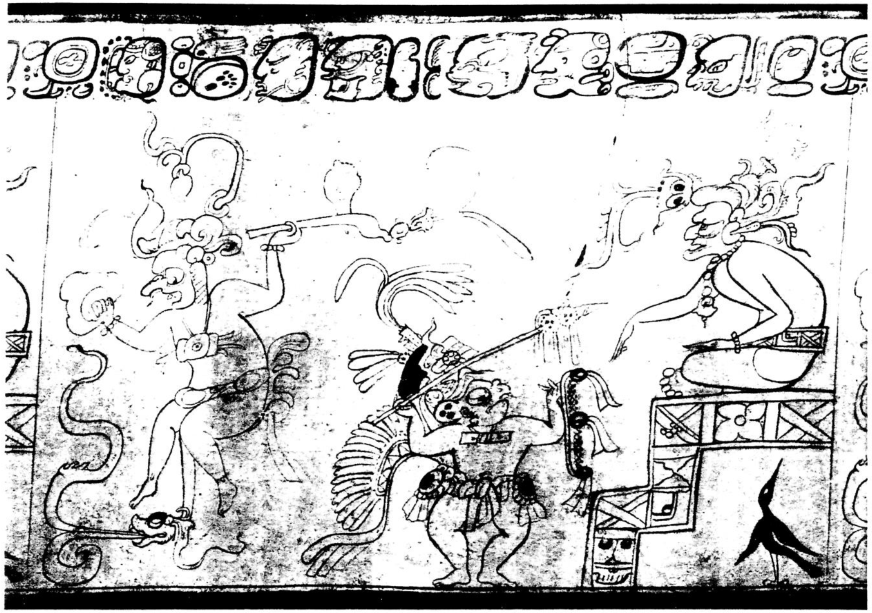
Maya thrones and benches were often decorated with skybands. Examples of such thrones have been found (e.g., in House E of the Palace at Palenque), and many representations exist in monumental carvings. Figures 9.12, 9.13, and 9.14 all contain scenes with skyband throne representations. These skyband throne benches would impart a celestial context to the individual seated on them; they would literally elevate the ruler to the heavenly realm.

The slender, cylindrical, codex-style vase in figure 9.12 has been described on previous occasions (M. D. Coe 1978:no. 6, 1982a:106–107; Robicsek 1978:pls. 133–136 and fig. 152). On the right, we see an aged deity sitting on a stepped skyband throne and wearing a skyband belt. There are many representations in the codices of similar deities placed in celestial context. Examples are the Venus regents in the upper registers of Dresden Codex pages 46–50. M. D. Coe (1978) had previously suggested that this deity is God N^1, a variant of God N, but he later (1982a:106) credited Nicholas Hellmuth with the suggestion that this is God D of the codices, or the celestial deity, Itzamna. This seems a more likely interpretation, but the name glyph in position B in the Primary Standard Sequence above may still argue for a God N association (see ibid.).

Figures 9.13 and 9.14 show similar aged deities seated on skyband thrones. In figure 9.13 (M. D. Coe 1978:no. 7), the skyband throne is a rather naturalistic rendition of a Maya bench throne. Here, again, Coe identifies the aged deity as God N^1, seated in front of the young Lunar Goddess. As in the previous example, the God D/Itzamna interpretation is to be preferred, for this Sun deity and his lunar consort sit on the celestial throne.

The roll-out of the striking polychrome vase in figure 9.14 again shows God D/N^1 seated on an unusual bicephalic stepped skyband throne, with the entire scene resting on a standard skyband. In front of the god is what appears to be a large covered vessel with an *ik* sign on it, and, on top, a death head and back support with a skyband device hanging down. The glyphic evidence would perhaps argue for the God N interpretation; in any event, we must consider the possibility that these several scenes (figs. 9.12, 9.13, 9.14) are more celestial than Underworld in character.

The magnificent polychrome vase shown in roll-out format in figure 9.15 contains one of the most spectacular and intricate compositions yet discovered. With the Primary Standard Sequence at the top, the complex scene is divided into two registers by a standard skyband in red with white elements. The larger primary scene fills the lower register and focuses on the aged deity with Sun God characteristics (related to Palenque Triad deity GIII?), who is seated on the jaguar-skin-covered *po* throne. In front of him crowd lines of old men and seated young women. The presence of enema vessels at the left, together with the depiction of a group of aged males (God N figures) and their female attendants, would argue that this is a portrayal of the Maya enema ritual. The presiding deity in the enema ritual on another vase (M. D. Coe 1978:no. 11) is one that

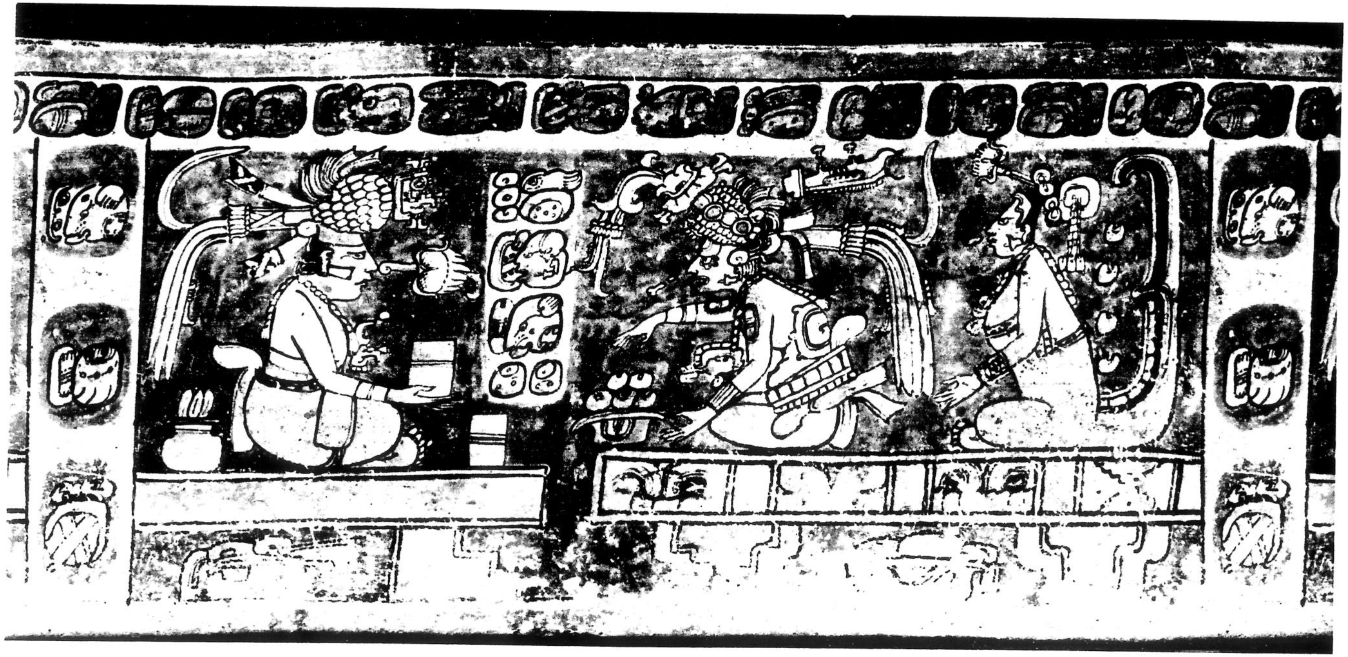


9.12 Maya codex-style cylindrical vase with an aged God D/N[1] seated on a stepped skyband throne. (Roll-out photograph copyright Justin Kerr, 1981. See Robicsek 1978:pls. 133–136; M. D. Coe 1982a:106–107.)

Coe calls the Rain Beast, which he tentatively identifies with God B, or Chac, and with the figures engaged in fishing on the Tikal bones (Trik 1963; Stuart, this volume). There is little connection, however, between the Rain Beast on Princeton 11 and the old deity with solar characteristics.

In figure 9.15, the region above the skyband contains additional God N figures, young females, and three deity figures that resemble somewhat the one enthroned below. Two of these—those on the right—are quite different: they have long upper and lower lip extensions; one has *cimi* god markings, and the other has *ik* god markings. The third god, on the left, is virtually identical to the one below; he is shown caught in the act of *lowering* one of the females through the skyband into the lower scene. From the stance of the two "floating" female figures below and the direction of their gaze, it is clear that they are joining those in front of the presiding deity. It is quite evident, then, that the third female figure is being lowered through the band rather than being pulled up from below. Presumably, the male figures are also being lowered to join the congregation.

9.13 Maya cylindrical polychrome vase with three gods enthroned, two on a skyband bench. (Roll-out photograph copyright Justin Kerr, 1981. See M. D. Coe 1978:no. 7; Robicsek and Hales 1981:fig. 40B.)



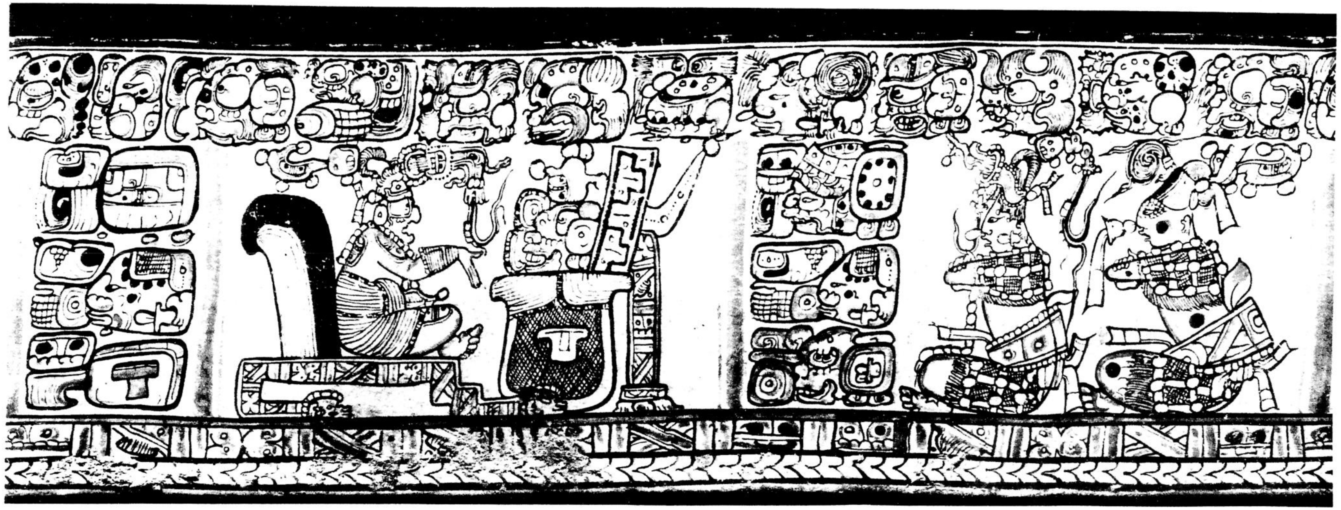
The skyband divider on this vase has the function of separating the upper (celestial?) world from the Underworld. If we follow clues from the arguments presented with figures 9.7 and 9.8, the lower register may depict a tomb scene with individuals passing, at least symbolically, from the Upperworld through the skyband capstone of the corbel vault into the crypt below for the Underworld Lord's enema ritual. The female figure caught in the moment of this rite of passage carries our attention from the Upperworld register into the tomb scene below.

CONCLUSIONS

In the Maya iconographic repertory, the skyband—the abbreviated ophidian body of the Bicephalic Sky Dragon—is a device used to indicate celestial context. Skyband representations on plates, bowls, and vases are found in the same contexts as those on murals and various monuments.

Ceramic plates and bowls are often found as parts of Maya mortuary furniture. Upturned bowls with "kill holes" are typically placed over the faces of the deceased. When such bowls are decorated with skyband borders, they can be interpreted iconographically as representing the celestial realm viewed from the Underworld by the individual in his afterlife.

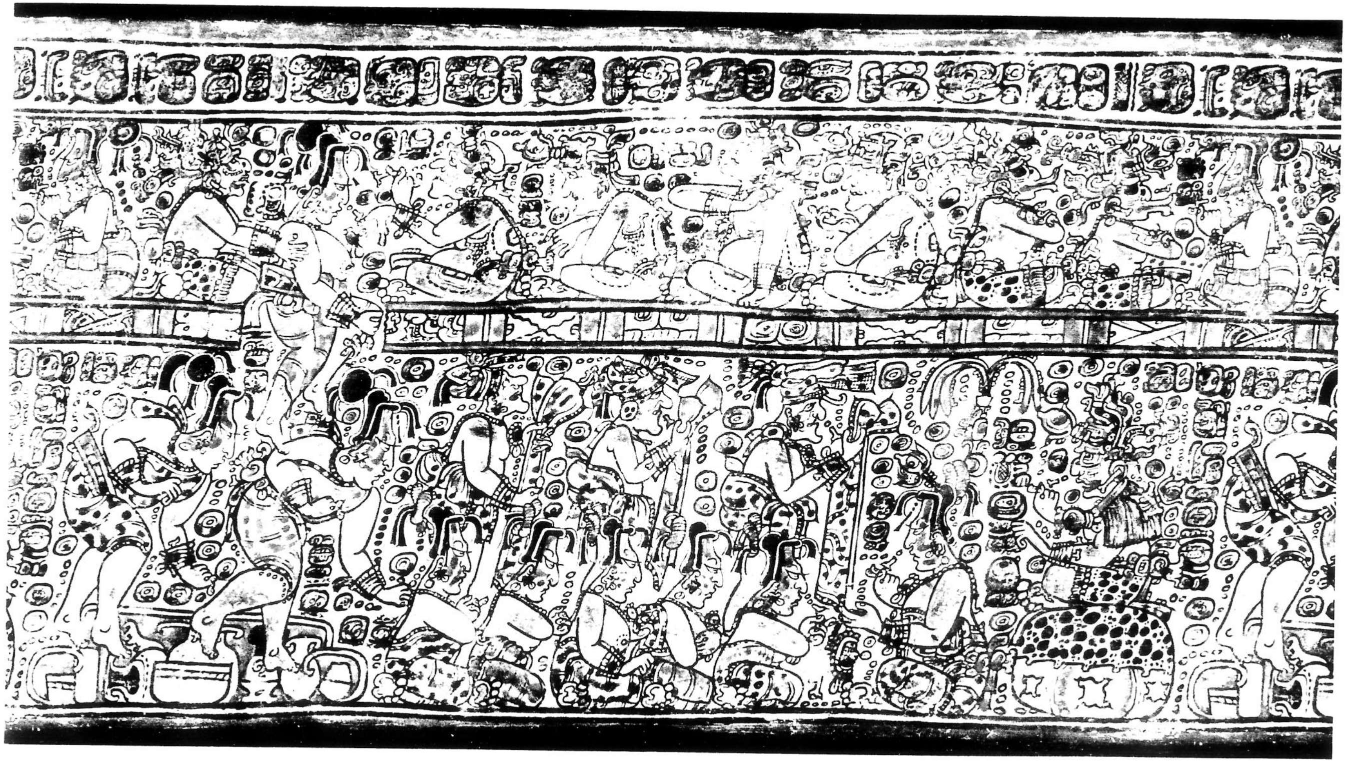
9.14 Maya cylindrical polychrome vase with an aged deity seated on a bicephalic skyband throne. The entire scene rests on a skyband base. (Rollout photograph copyright Justin Kerr, 1981. See Robicsek and Hales 1981:fig. 41A.)



The vase scenes with a skyband above—and, in some cases, a *caban* (earth) band below—would technically be placed somewhere between the heavens and the surface of the earth. However, some examples presented here (e.g., figs. 9.10, 9.11) would argue convincingly that the scene is underground in the Underworld, indeed, perhaps in a vaulted tomb crypt. The fine example shown in figure 9.7, with the death-eye fringe below the skyband, would also suggest the tomb context, the realm of the Underworld Lords.

Representations of skyband thrones and benches, such as those in figures 9.12, 9.13, and 9.14, may have only a celestial context. In other nonceramic contexts, such depictions indicate that the seated individual is in the sky or occupies a position in the Upperworld realm. All of the various celestial and planetary deities, however, must

9.15 Maya cylindrical polychrome base with skyband dividing upper and lower scenes. (Roll-out photograph copyright Justin Kerr, 1981. See Robicsek and Hales 1982:no. 1.)



take their daily sojourn in the Underworld, so their presence in these scenes—for example, the enthroned Lunar Goddess in figure 9.13—does not convincingly argue against the potential Underworld character of the scene as a whole.

Finally, the unique example from the polychrome vase in figure 9.15 shows an individual passing from the Upperworld above the skyband into the Underworld scene below. We can be reasonably certain of the Underworld character of the scene in the lower register because it depicts a phase of the Maya enema ritual. Numerous other examples show this rite to be associated with the general themes of Maya mortuary ritual and the province of Xibalba, the realm of the Lords of the Underworld. We further suggest that the scene beneath the skyband may depict supernatural events taking place in the crypt itself, with the skyband serving as the capstone of the vault.

From the evidence presented, it is not clear whether all the scenes painted on Maya funerary ceramics take place in the Underworld. The skyband frames, borders, and thrones provide a celestial context, and, when all such cases are considered, the scenes represented may still be best interpreted as episodes in that final Maya journey to Xibalba, with the promise of triumph over the Underworld Lords and an eventual resting place in the realm of the Celestial Dragon.

Acknowledgments

The seeds of many of the ideas expressed in this paper would never have germinated without extended conversations with Michael Coe, Justin and Barbara Kerr, Linda Landis, and David Stuart. Permission to publish many of the photographs was generously given by Francis Robicsek; he and his son Stephen were kind enough to prepare the necessary prints. Through the exceptional generosity of Justin and Barbara Kerr, I was able to obtain all of the magnificent roll-out photographs without which studies of Maya vase painting would be immeasurably more difficult.

10

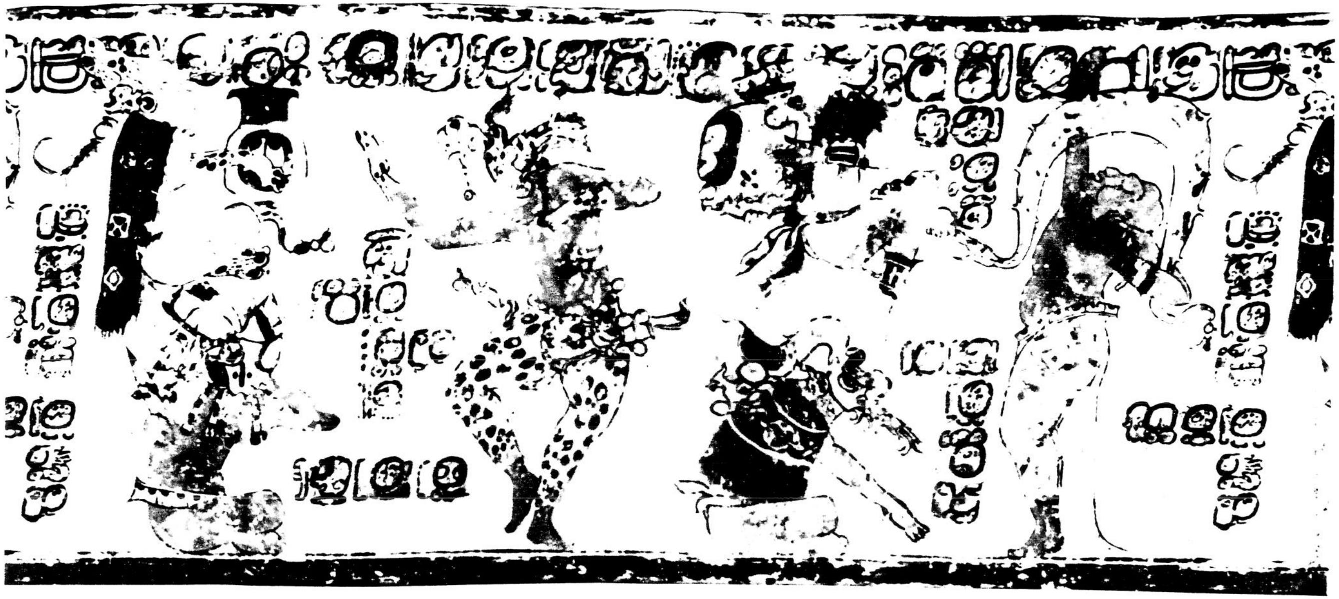
LINDA SCHELE

The Xibalba Shuffle: A Dance after Death

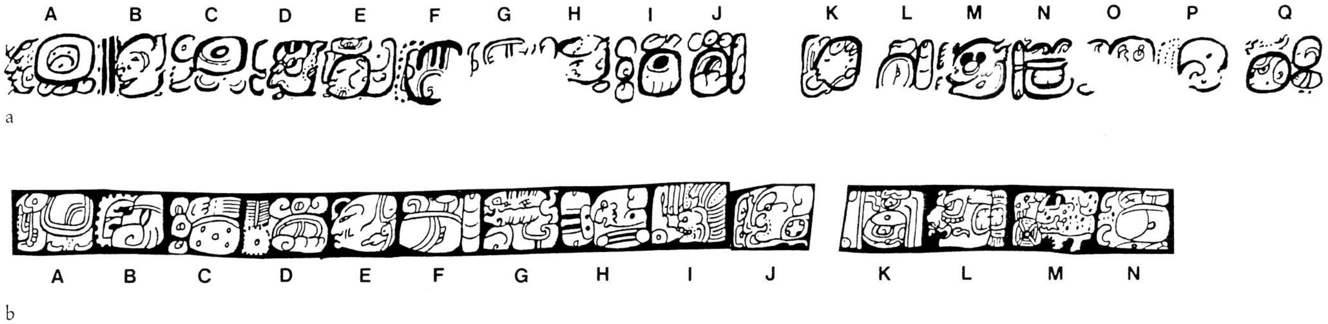
The famous polychrome vase from Altar de Sacrificios (fig. 10.1) displays an important complex of iconography, which Adams (1971:76–78, 1977a:418) has interpreted as a historical ceremony attended by dignitaries of Yaxchilan and Tikal on the occasion of the funeral of a woman interred in Burial 128. The vase was found in the closely associated Burial 96 with the remains of a young woman. The historical interpretation of the Altar vase scene is based upon the following evidence.

1. Of the nineteen pots found in both burials, only four were made locally. Stylistically, the remaining fifteen vessels fell into three groups, one each from the Middle Usumacinta, the Central Peten, and Alta Verapaz (Chama).
2. Emblem Glyphs appearing in several of the name phrases seem to match these regions of ceramic contribution, that is, Yaxchilan and Tikal.
3. One of the principal figures is identified as probably being Bird-Jaguar of Yaxchilan, and a secondary figure is identified as possibly being the younger brother of Ruler B of Tikal.
4. The most probable Long Count position of the Calendar Round date (9.16.3.0.0 3 Ahau 18 Zotz') is only two *tuns* after the accession date (9.16.1.0.0) of Bird-Jaguar of Yaxchilan, one of the figures identified in the scene.

While I accept the death and funerary associations of the Altar Vase, the intent of this paper is to propose an alternative interpretation of the vase and to associate it with an iconographic complex found on Late Classic monuments at Palenque, that is, on the tablet from Temple XIV, on the Dumbarton Oaks Tablet, and on the west façade of the Palace. It is my proposal that the Altar Vase (as well as several similar vases now known) and the Palenque monuments represent different stages in an Underworld rite of passage—a rite of passage which corresponds in part to the Hero Twin myth cycle of the *Popol Vuh*, and which culminates in the defeat of the Lords of the Underworld with a dance, described in the *Popol Vuh*.



10.1 The Altar de Sacrificios Vase. (Photograph courtesy of the National Geographic Society.)


A B C D E F G H I J K L M N O P Q
a
A B C D E F G H I J K L M N
b

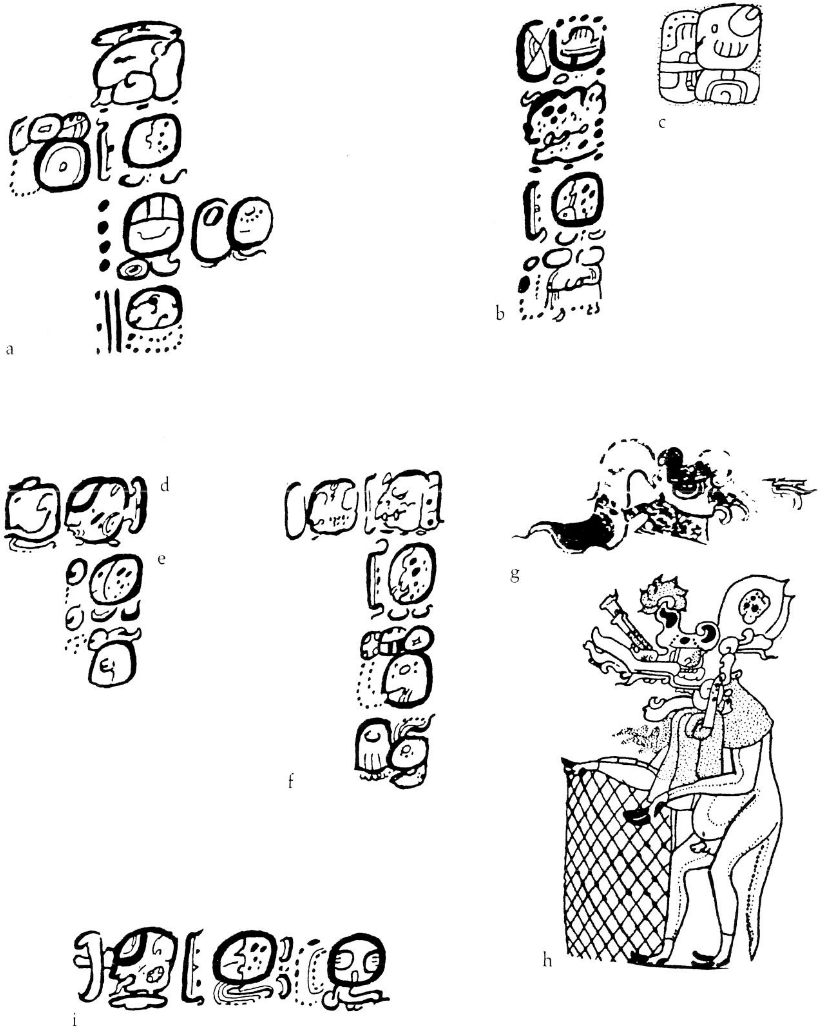
10.2 a. Rim text of the Altar Vase. (Drawing by the author.) b. Rim text of the Vase of the Seven Gods. (After M. D. Coe 1973:109.)

THE ALTAR VASE

The rim text of the Altar Vase (fig. 10.2a) has been associated with the female buried in one of the two tombs (Adams 1977a:413–415). Although I am doubtful that this name phrase includes the female prefix needed to identify females, the inclusion of a historical name with rim texts and M. D. Coe's (1973) Primary Standard Sequence is not unusual. For example, Coe's Vase 49 (ibid.:106–109) exhibits a scene marked as nonhistorical and supernatural not only by the identity of the actors and the scene, but by the presence of 4 Ahau 8 Cumku (the beginning of the present era) as the date of the scene. In the rim text of this vessel, the Vase of the Seven Gods (fig. 10.2b), a historical person is named (K–N), following the T1.757 general verb that often introduces names on both monuments and pots. I suggest that the record of historical persons in rim texts does not indicate their presence within, or their association with, the scene. (Coe has shown that, in most cases, the rim text does not refer to the scene.) Rather, as Adams's interpretation suggests, these name phrases may record persons for whom such vessels were commissioned. If this suggestion is correct, the association of rim name phrases with deceased persons may indicate that this type of funerary pottery was specialized and commissioned for use in tombs, but it does not necessarily imply that the named persons are shown in the scenes.

The secondary texts on the Altar Vase have been taken as evidence that the figures shown represent foreign dignitaries—perhaps kinsmen of the deceased—who came to Altar de Sacrificios to participate in the funerary rituals that are shown in progress on the vase (Adams 1971, 1977a). However, new information has come to light that makes these identifications less certain. In text *a* (fig. 10.3a), the initial glyph is not Bird-Jaguar: the superfix is not a bird, and the main sign is only superficially a jaguar. The mouth is marked with the volute pattern typical of the Patron of Pax, which is unknown in the Bird-Jaguar glyph at Yaxchilan. In text *e* (fig. 10.3b), the initial glyph is not the "sky" glyph of the Tikal tradition but rather the inverted "sky" sign (fig. 10.3c) found in the anniversary phrases at Palenque (Tablet of the Cross, 05; Tablet of the Foliated Cross, L2; Tablet of the Sun, N5). The prefixed sign may be *etz'nab*, but, in the National Geographic photographic roll-out of the vase, I see indications of interceding lines identifying the glyph as T592. There is no evidence that the normal "sky" glyph and the inverted version are semantically identical, and I must conclude that this name glyph is not related to the known name patterns at Tikal.

Text *c* (fig. 10.3d) contains a glyph that seems to be the anthropomorphic version of the object the figure is holding (fig. 10.3e). Text *d* (fig. 10.3f) refers to a figure wearing the headdress of a dragon with a deer ear (fig. 10.3g). This same beastie is known on other processional pots (fig. 10.3h), and the second glyph of text *d* is a skeletal deer head (fig. 10.3f). Finally, the axe-"jog" glyph in initial position in text *b* (fig. 10.3i) has the forehead mark on the "jog" that is seen on the figure named in the text. There



10.3 Secondary texts on the Altar Vase. a. Text *a*. b. Text *e*. c. Inverted "sky" sign. d. and e. Text *c*. f. Text *d*. (Drawings by the author.) g. Detail of Altar vase. h. Detail of cylinder vase. (Drawing by the author.) i. Text *b*. (Drawing by the author.)

is little doubt that each passage names the figure it accompanies, and in no text is there a glyph that can be identified syntactically or morphologically as a verb. The texts simply name the actors without reference to the pictured actions.

The presence of known Emblem Glyphs within several of the name phrases has been used as evidence of historical identity, but, since the corpus of documented Maya vases has grown, these Emblem Glyphs and others are now known to appear on many pots of different styles and probable origins. Furthermore, the Emblem Glyphs are found not only in the name phrases of figures that are possibly human but also in the name phrases of demonstrably supernatural figures (for example, skeletons). It has been suggested (Quirarte 1979b) that these nonhuman figures are impersonators, like the god figures in Room 1 at Bonampak, but I believe that the supernatural, Underworld nature of the majority of these scenes, especially those of the processional type, rules out this suggestion. Many of the figures that have Emblem Glyphs in their names simply cannot be human beings impersonating supernaturals. I do not know how to interpret the presence of these Emblem Glyphs in the name phrases of Underworld beasties, but I suggest that perhaps some of them represent the dead in the Underworld.

The T1.539 glyph, present in all the Altar Vase name phrases, has been interpreted by Adams (1977a:415) and Quirarte (1979b:136) as marking each figure as a lord of a Jaguar lineage. I cannot accept this interpretation, because this title glyph (*u balan-ahau*) occurs with a great variety of creatures, especially in processional scenes populated by assorted beasties, animals, polymorphs, grotesques, and death images of all kinds. This title must record some quality common to all of these, to Chan-Bahlum of Palenque, and to the Tikal Emblem Glyph. On the basis of this distribution of the jaguar-spotted-*ahau* glyph, I have suggested a reading of *balan-ahau/balam-ahau*, translated as 'hidden lord' or 'jaguar-lord,' depending on the context (Schele 1985a). In the context of the processional pots and the death or burial record of Shield-Jaguar on Yaxchilan Stela 12, it marks the lord as "hidden" or in the Underworld.

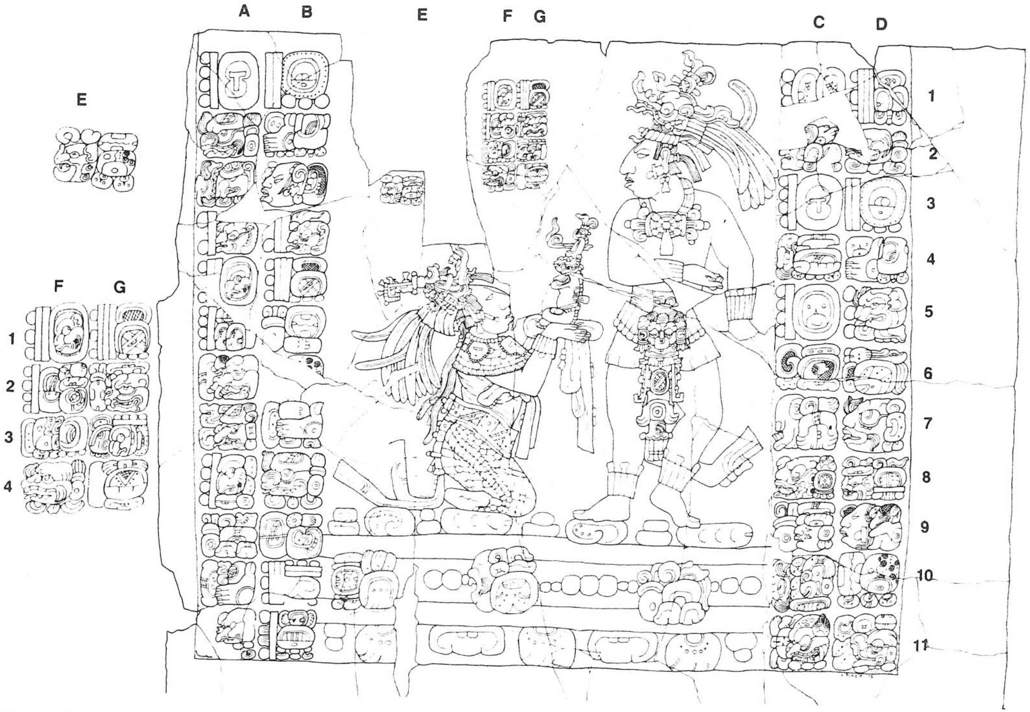
Finally, I consider the composition and some of the features of the individuals on the Altar Vase to indicate the Underworld or nonhistorical information. Two of the figures float without visible support; historical figures (even the god figures at Bonampak) are subject to the effects of gravity. Vase Figures 5 and 3 have feline paws and feet, without a demarcating line to show that the animal features are worn; this is especially evident in Figure 3. Vase Figure 6 does not appear to wear a mask, yet he has no eyes, and his face is marked with a *cimi* (death) sign. I believe that impersonators are clearly marked as wearing costumes when their historical identity or humanity is important information. For example, on Yaxchilan Stela 11, the profile of Bird-Jaguar is shown behind the mask of GI of the Palenque Triad, and this x-ray cutaway is known from several occurrences in pottery scenes. If these figures were important contemporary kinsmen (especially of the rank of Bird-Jaguar of Yaxchilan), I believe that their portraits would have been clearly and prominently shown.

I know of one—and have been informed of other—vases that show compositions related to the Altar Vase. The scene known to me includes the two dancers of the Altar Vase, plus an additional one, and, as on the Altar Vase, secondary figures float in the spaces between the dancers. These vases are unlikely to be from Altar de Sacrificios and certainly are not from the same tomb. The dancing figures are demonstrably the same, but the Emblem Glyphs and name phrases are different. These additional pots suggest that the Altar Vase depicts a funerary-Underworld mythic complex that was utilized in the imagery of specialized funerary ware at many different sites. The vase does not record the enactment of a historical ceremony attended by foreign dignitaries to commemorate the death of an Altar de Sacrificios woman; rather, it is a version of this afterlife myth, which specifically refers to the dead woman by her name phrase in the rim text. This hypothesis is supported by a new interpretation of Temple XIV and the Dumbarton Oaks Tablet from Palenque.

The Tablet of Temple XIV

Temple XIV was excavated by Jorge Acosta (1977:282–284) in 1970, and, although it was found in a bad state of preservation, the temple yielded a small interior sanctuary (similar to those in the Cross Group), which housed a large tablet (fig. 10.4). Acosta (ibid.:283) commented on the unusual composition of the tablet and speculated that the scene "could represent the young god of maize or a Maya dignitary of great importance."

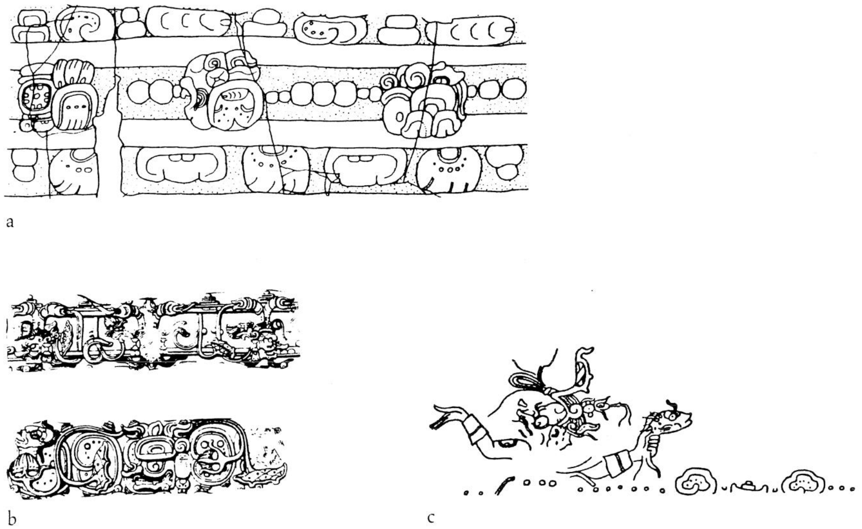
Not only is the composition of the Temple XIV Tablet unusual, but the placement and construction of the temple are intrusive to the Cross Group. The major temples of the Cross Group share features demonstrating that they were conceived and constructed as components of an integrated architectural group. The architectural proportions, scales, sizes, plans, and positions within the group are interrelated, and the iconography and inscriptions on the tablets are continuous, relating not only the same information in each tablet, but also different kinds of information vital to the understanding of the entire group (Schele 1974, 1976, 1979a). In all of these categories, Temple XIV is an exception. Its plan includes the interior sanctuary building, but the proportions of the building and the distribution of its doors violate the conventions of the other three temples. Perhaps most important, the temple is placed directly atop the only processional access from the rest of the site into the center of the Cross Group, and it obstructs vision from within the group to the northern horizon and the rest of the city. Architecturally and spatially, it functions like a cork, bottling up the space and access to the Cross Group.



10.4 Palenque, the Tablet of Temple XIV. (Drawing by the author.)

Like many of my colleagues, I have wondered how the architects or the ruler (Chan-Bahlum) who designed the complicated and brilliantly executed Cross Group could have damaged its integrity so insensitively. Many people who knew the site before 1970 have expressed their regret that Temple XIV was reconstructed, because it interferes with the beauty of the Cross Group. It is my belief, however, that we must assume that this placement of Temple XIV was probably deliberate and meaningful. As I hope to show, Temple XIV and its intrusiveness are very clearly explained by its iconography, its inscription, and its social and religious function.

The scene on the Temple XIV Tablet is of a type that at Palenque includes only the Dumbarton Oaks Tablet and Pier D of House D. It shows Chan-Bahlum in a dance posture, looking to his right at a woman who is shown holding a God K manikin and rising from a cross-legged seated position. Both figures are shown on a ground register (fig. 10.5a), marked by the stack of rectangles and shell scrolls that mark water on the canoe



10.5 a. Detail of Tablet XIV. (Drawing by the author.) b. Details of designs on House D, Piers C and F. (After Maudslay 1889–1902, vol. 4:pls. 34, 37.) c. Detail from canoe scene on bone from Tikal Burial 116. (Redrawn by the author after Trik 1963:fig. 6)

scenes from Burial 116 at Tikal (fig. 10.5c). Interspersed among the water signs are T188 *le* signs, the glyph that occurs in the 'inaugural' (T684) and 'seating' (T644) phrases as a term for 'succession.'

The middle area of the ground register includes a line of small and large dots. This motif occurs as a sign for water on the Tikal canoe scene from Burial 116, on an Early Classic stuccoed bowl from Burial 160 (see W. R. Coe 1967:100–101), and in the *imix* glyph (both T501 phonetic *ba* and the "waterlily" variant). The lower third of the ground register includes "water" stacks and a series of glyphs that read phonetically as *ba-na-ba-na-ba*. I suggest that in all the western Mayan languages these phonetic signs were meant to read as *naab*, the term for waterlily and for bodies of still water, such as lakes and canals. The identification of the lower register of the panel as water is reinforced by the decoration of the outer wall of the sanctuary. Each front vertical wall displays a figure, the one to the left of the door standing in front view and that on the right in profile. Below these figures, the basal register across the entire front of the temple is marked with waterlilies in personified form (Acosta 1977:fig. 13). The basal registers of both the sanctuary and the sanctuary tablet are, therefore, marked with the signs—shell scrolls, "water" stacks, "water" lines, and waterlilies—that mark water environments in Maya art. The figures on the tablet literally dance on water. Since water was often used as the traditional element between the Middleworld and the Underworld (see the Tikal canoe scenes and other Early Classic burial iconography at Tikal), the event shown is placed either at this transitional point or in the Underworld. The pictured activities do not take place in historical space.[1]

Tablet XIV has other oddities as well. The male figure is clearly Chan-Bahlum, but the profile is a tracing of that in the Temple of the Sun. Although all Chan-Bahlum's portraits share recognizable physical features, this is the only known traced profile, which suggests that he was not available as a model. He is shown in dancing posture on a major stone monument; dancing postures are known from other Maya monuments, but these figures wear either ballgame equipment (La Amelia Stelae 1 and 2) or the attributes of the Jaguar God of the Underworld (Quirigua Stelae A and C, and these may not represent the ruler in jaguar dress, but rather the god himself).

On Tablet XIV, Chan-Bahlum wears a zoomorphic headdress from which emerges a branch of the "tree" motif, above which rests a "smoking-*k'in*" sign. He wears the trilobed pectoral, characteristic of gods GI and GIII of the Palenque Triad, and, at his waist, is the skeletal, zoomorphic variant of GIII, the Jaguar God of the Underworld (Schele 1979b). He dances wearing the attributes of GIII.

The female to his right is not identified glyphically, so her identity is problematic and must be deduced from the Dumbarton Oaks Tablet, on which the protagonist (Kan-Xul) is flanked by his mother on the right and his father on the left. If the Dumbarton Oaks Tablet and Tablet XIV are parallel, the Tablet XIV female should be Chan-Bahlum's mother, Lady Ahpo-Hel. She is shown frozen in action; this is represented by the disturbed upward thrust of her rear loincloth and the upraised position of her torso. She wears the net overskirt characteristic of females and an *ik*-marked cape over her *huipil*. Her headdress is the Quadripartite Monster, but, as is characteristic of other female portraits (J. H. Miller 1974:154–155), the stingray spine has been replaced by the square-nosed, jeweled serpent. She gestures toward Chan-Bahlum with a God K manikin, but in a very odd arrangement: God K faces her and not Chan-Bahlum, the obvious protagonist. Her frozen action is clearly an important part of the information conveyed, since she could have been shown kneeling before she had begun to rise or standing after she had arisen. It is as if the artist wished to portray her reaction (rising from a seated position) to the appearance of Chan-Bahlum.

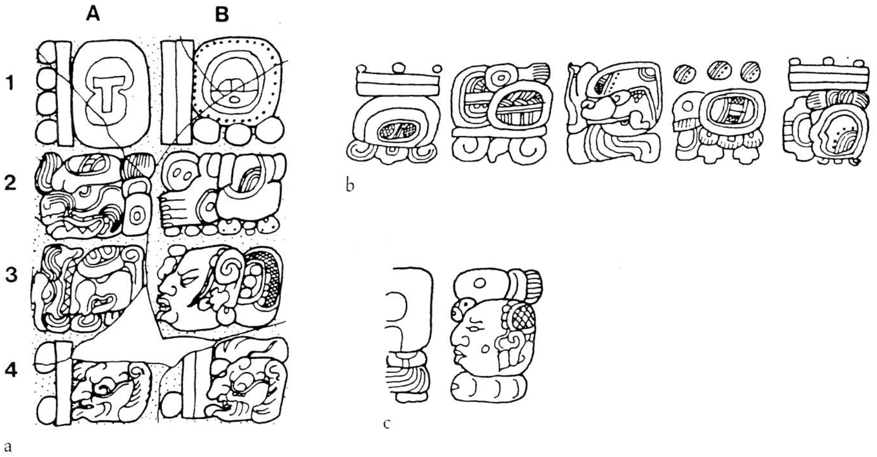
The meaning of the Tablet XIV scene is recorded in the inscription, which details its mythological and chronological context. The text begins on the left with the date 9 Ik 10 Mol (fig. 10.6a), which occurred in the far-distant past. The event is recorded at

---

[1] During the 1980 Princeton conference, it became clear that a great many Underworld scenes on Maya pottery are marked by water symbols as occurring under water. It now seems evident that, in at least some afterlife mythology, the Underworld was conceived as being underwater. Waterlily water symbolism was used to mark the Underworld as a location, not merely to serve as a transitional layer between the Middle and Underworlds. The figures on Tablet XIV are poised on top of the Underworld.

A2–B2 with an auxiliary verb[2] utilizing *xoc* + *ti* (A2) and a verbal noun, which specifies the particular act—in this case, a "*chicchan*-in-hand" with the forehead of God K adjoined. The object held in the hand is *chicchan*, whereas, in other contexts on this tablet and elsewhere, it is *ahau*. This *chicchan* variant occurs, however, as the sign for the day Ahau on Piedras Negras Lintel 12 (fig. 10.6b), and, on the Copan Hieroglyphic Stairway, an anthropomorphic *ahau* carries *chicchan*-serpent markings (fig. 10.6c). At some level, *chicchan* and *ahau* are interrelated graphically. This "*ahau*-in-hand" event is prominent at Yaxchilan, where, in all of its occurrences on pictorial lintels, it accompanies the holding of the God K scepter (Schele 1978, 1980; Josserand, Schele, and Hopkins 1985). The event recorded on Tablet XIV is the display or holding of God K, and God K is further specified by the God K forehead mirror adjoined as a semantic determinative.

The subjects are named following an *u cab* (the *cab* is in head-variant form), a glyph that Floyd Lounsbury, Peter Mathews, and I tentatively accept as a term specifying something like "under the auspices of . . ." (Schele 1980; Lounsbury and Math-



10.6 a. Main text of Tablet XIV, A1–B4. b. Detail of text on Piedras Negras Lintel 12. c. Glyph from Copan Hieroglyphic Stairway. (Drawings by the author.)

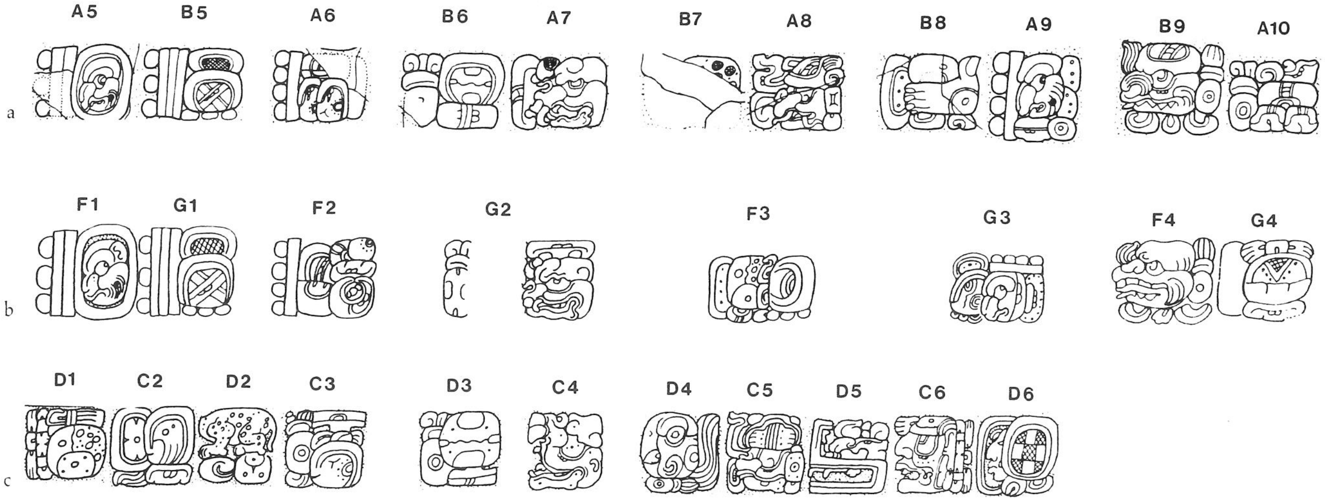
---

[2] Auxiliary verb + *ti* + noun constructions are special verbal constructions recently recognized in the inscriptions and in modern Chol (Josserand, Schele, and Hopkins 1985; Schele 1979b, 1980). The auxiliary verb is general in semantic content and usually records some form of tense aspect. In the inscriptions, the following glyphs have been identified as auxiliary verbs: T1.757, T516:103, T1.501:102, T1.580, and T1.513. In this kind of construction, the auxiliary verb is followed by *ti* (T59 or an equivalent in the inscriptions) and a nominalized verb (so identified because it never carries verbal affixing), which specifies the particular event. In the Temple XIV example, the *xoc* head usually found in Anterior and Posterior Event Indicators functions as the auxiliary verb.

ews, personal communications, 1980). The actors are named at B3–B4 as the Moon Goddess (a female head with the lunar head as a semantic determinative) and two aged male heads, which are unique to this inscription. Whether the two latter heads qualify the Moon Goddess in some way or represent distinct personages is impossible to ascertain with the information presently available.

This first clause is followed by a clause beginning with a second date, 13 Oc 18 Uo (fig. 10.7a), which, because it is not marked by a Distance Number, should be the next occurrence of the Calendar Round after the initial 9 Ik 10 Mol (13 Oc 18 Uo occurs 11.15.8 after 9 Ik 10 Mol and 2.1.10.12 before it). Since the same clause occurs in the secondary text in the center of the scene (fig. 10.7b), I will discuss the remainder of it in the context of a comparison of both texts. The verb (marked by the presence of T181) consists of the number 9, T679, and a doubled *cauac* or its substitute (fig. 10.7a). The subject of the event is named with a glyph series that includes T59 (*zac*), T570 (a bone), T4 (phonetic *na*), and the skull variant of the Palenque Emblem Glyph bone. The same series of glyphs occurs on the Palenque Tablet of the Sun (fig. 10.7c) at D3–C4, where it is part of the name phrase of GIII. I assume that it is GIII who is named as the subject of the Tablet XIV event, and that Chan-Bahlum is wearing his attributes in the scene.

The name of the subject is followed by a possessed noun—*u balan-ahau* (the glyph noted on the Altar Vase)—and God K. In this context, the noun must refer to

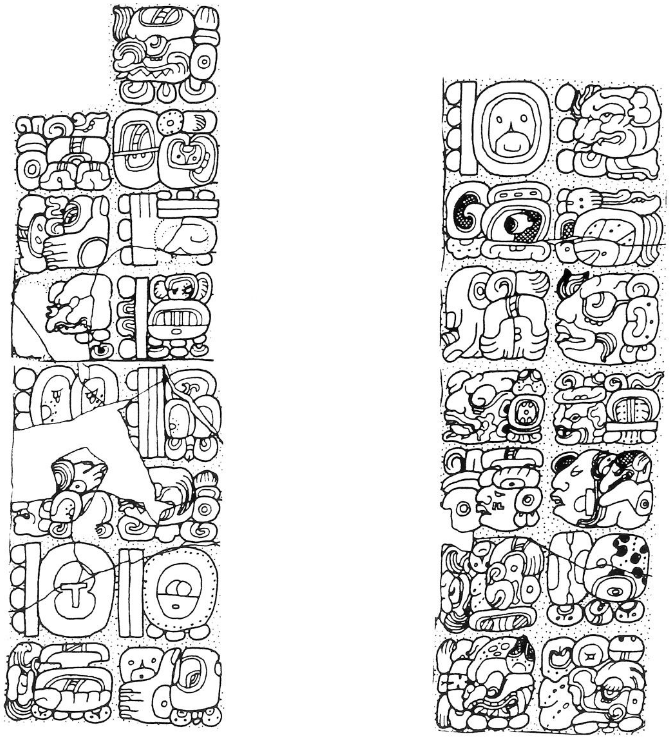


10.7 a. Main text of Tablet XIV, A5–A10. b. Secondary text of Tablet XIV. c. Detail of text of Palenque Tablet of the Sun. (Drawings by the author.)

GIII (he is named by the *balan-ahau* glyph at D1 on the Tablet of the Sun), and the antecedent of the possessive pronoun is God K; this suggests that there is a relationship between GIII and God K, or that the event is an Underworld one.

This clause is completed by a phrase that differs in the main and secondary texts. In the secondary text, the phrase includes *u cab* ('under the auspices of') and Bolon Yocte, a deity who appears frequently in the Palenque inscriptions, although his portrait has not been identified. This phrase, *u cab Bolon Yocte,* suggests that the act was executed by GIII under the auspices of Bolon Yocte. In the main text, instead of *u cab,* an *ahau*-in-hand glyph precedes the Bolon Yocte glyph. This substitution suggests two things: (1) The 13 Oc 18 Uo event, like the 9 Ik 10 Mol event, was the display of the God K manikin, enacted first by the Moon Goddess and eleven years later by GIII, who is the jaguar version of the Underworld Sun (the structure of the main text is that of a couplet [verb 1 actor—verb 2 actor]); and (2) Bolon Yocte is either the deity under whose authority these acts occurred or he is in some way associated with or equivalent to GIII (in the former case, the structure would be verb 1 GIII—Verb 2 Bolon Yocte; in the latter, verb 1 GIII—verb 2 GIII as Bolon Yocte). The substitution of *u kab* for the Bolon Yocte glyph in the secondary text strongly suggests that the double-*cauac* event and the *ahau*-in-hand are semantically equivalent.

The next clause begins with the Anterior Date Indicator and the prior event written in yet another form (fig. 10.8, *left*), one that occurs in the ground register as the third glyph. The presence of this event glyph in the ground register suggests that the pictured scene is a reenactment of the original action. However, two separate events have been named in the text—the 9 Ik 10 Mol event and the 13 Oc 18 Uo event; to which does this passage refer? A tremendous Distance Number follows the passage and leads to a date within the history of Chan-Bahlum. Thompson (1971:vii) attempted to decipher this Distance Number by postulating it as 17.16.8.7.1.13.18, a number that cannot be supported by an examination of the surviving text. On the other hand, Floyd Lounsbury (personal communication, 1978) has reconstructed it as 5.18.4.7.8.13.18, a Distance Number that fulfills the conditions of both the arithmetic and the surviving parts of the text. Although it is not immediately evident from the syntax, this Distance Number must stand arithmetically between 9 Ik 10 Mol (the first date of the text) and 9 Ahau 3 Kankin, the historical date. To reduce the ambiguity as to the base of this Distance Number, the Palencano scribe framed it with a statement of its origin and end. B9 is 'count since'; A10 is the prior event, which, in this case, must be semantically parallel to the first *ahau*-in-hand event, because it occurred on 9 Ik 10 Mol. B10 is the later event, marked by T679, the Posterior Event Indicator. This event (T79:683[178]) has been recognized as an anniversary event by Lounsbury (personal communication, 1976) and by me (Schele 1978). The glyph that follows seems to specify the nature of the anniversary by naming the prior event, *ahau*-in-hand, now with the *ahau* replaced



10.8 Text of Tablet XIV. *Left*: B-9–B-12, C-1–C-4. *Right*: C-5–D-11. (Drawing by the author.)

by the forehead mirror of God K. The event is qualified, however, by the prefix *yax*, a term glossed as follows by Barrera Vásquez (1980:971):

> *Yax*: en composición de nombres, cosa primera, la primera vez. . . . *Yaax*: antes *Yaxhal*: ser primero o anterior *Yaxil*: primacía, anterioridad.

In the Yucatecan languages, *yax* is glossed as 'first,' and here it qualifies the "God-K-in-hand" event as the "first" such event, of which the anniversary is being celebrated in historical time.

The second part of the framing sections occurs at C3–D3, where 9 Ik 10 Mol is again recorded after an Anterior Date Indicator at D2. The two glyphs following the date repeat the first event with "*ahau*-in-hand/God K" at D4, preceded by another glyph for "first," here based on an ordinal construction utilizing a *na* sign as the term for "first."[3] This Distance Number passage is loosely paraphrased as follows:

> Count since event 1 until the anniversary of the first (*yax*) God-K-in-hand, 18 days, 13 *uinals*, 8 *tuns*, 7 *katuns*, 4 *baktuns*, 18 *piktuns*, 5 *cabaltuns*, count since 9 Ik 10 Mol the first (*u.na:??.al*) *ahau*-in-hand/God K [until] 9 Ahau 3 Kankin event 2.

The second event (the historical one) is recorded at C6, but no meaning has yet been associated with it. The object of the phrase is recorded in the second half of C6 and at D6. Peter Mathews (peronal communication, 1980) and I have tentatively identified the glyph at C7 as an expression of agency. The agents are thereafter named as a series of supernaturals with GI at D7; GIII at C8; and Hun Ahau, the calendar designation of the father of the Triad (Lounsbury 1980), at D9. The text closes with the name phrase of Chan-Bahlum (C10–D11), but its syntactic function is unclear because no other verb intervenes between the names of the gods and that of Chan-Bahlum. Either he is characterized as one of the agents and in the company of the gods or he is named as the possessor of a quality (the "water-group" God C glyph) referring to the gods and named at C10. Because he is shown acting in the scene, and because he wears the attributes of GIII, I assume that he is named as one of the agents.

Since the Distance Number fits between the Calendar Round dates no matter what their position in the Long Count, there is nothing in the text that can be used to place the historical date in the Long Count. However, the temple placement and certain characteristics of the scene favor a posthumous date. Temple XIV was clearly considered when the Cross Group was designed. Because of its intrusiveness and because it obstructs ceremonial access to the group, I suggest that it was later than the other three temples. The interior and exterior sanctuary iconography mark the location of the scene as on water, an environment that suggests a state of transition. The female is on the right of the principal figure, an arrangement that occurs only on the Oval Palace Tablet and the Dumbarton Oaks Tablet. Chan-Bahlum is shown dancing, which, at Palenque, occurs only on the west piers of the Palace (also marked as water environments) and on the Dumbarton Oaks Tablet, both of which have iconography related to that of Tablet XIV. Within the context of the unusual qualities listed above, the historical date can be placed within the Long Count.

---

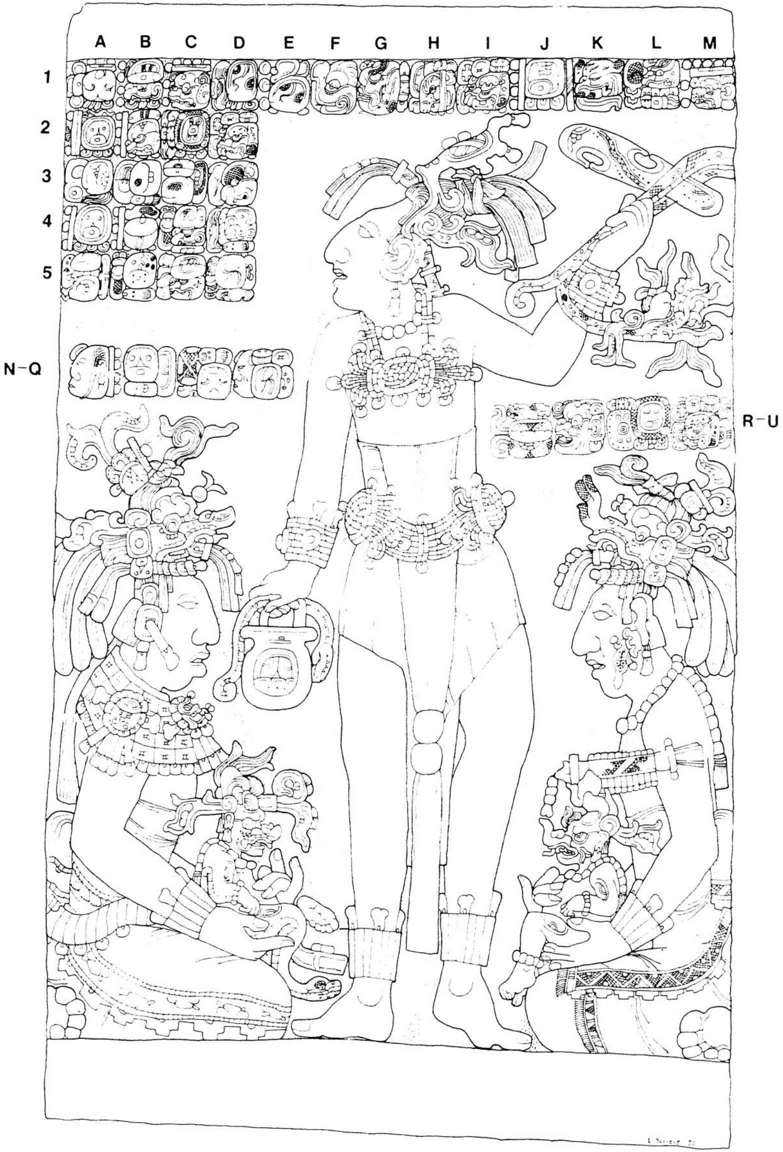
[3] The glyph at C4 on Tablet XIV was first identified as an ordinal construction for 'first,' on the basis of its occurrence in the passage recording the three *katun* endings of Pacal's reign in the Temple of the Inscriptions. The *katun*-ending expressions of the second two *katuns* (9.11.0.0.0 and 9.12.0.0.0) are clearly preceded by ordinal constructions for 'second' (A1, middle tablet) and 'third' (F9, middle tablet). The first *katun* of his reign (9.10.0.0.0) is recorded at T7–T9 on the east tablet, where it is written as "it ended, the 1 Ahau Katun, . . . the seating of the *tun*." The glyph preceding the "seating of the *tun*" is the same ordinal construction as that found on Tablet XIV. It is composed of a possessive pronoun, T4 (a sign now known to be freely substitutable for T23 *na*), T565, and T178. All these signs, except T4, *na*, occur in other ordinal constructions; therefore, T4 is the sign that must specify 'first.' Aulie and Aulie (1978:84) gloss *ñajan* as 'primero' in Chol, and Slocum and Gerdel (1965:164) gloss *nahil* as 'primero' in Tzeltal. *Nabe* is 'first' in the Quichean languages. The two framing sections of Tablet XIV both identify 9 Ik 10 Mol as the date of the "first *ahau*-in-hand" event, but different constructions for "first" are contrasted in the two sections. *Yax*, surviving as "first" in the Yucatecan languages, occurs in the first section, and an ordinal construction utilizing the stem *na* and surviving in Chol, Tzeltal, and perhaps the Quichean languages is used in the second.

9 Ahau 3 Kankin occurred only once during Chan-Bahlum's life, at 9.11.1.2.0, or when he was 18.13.14 (18 years and 179 days old). This date is 30 years before his accession, and it seems unlikely that a temple would be dedicated to an event in the life of an heir-designate or that he, not the ruler, would be the actor in an event as momentous as the anniversary of the "first" presentation of God K, some 945,748 *tuns* earlier. The next occurrence of 9 Ahau 3 Kankin was at 9.13.13.15.0, exactly three *haabs* and one *tzolkin* after the death of Chan-Bahlum. The arithmetic does not seem to be coincidental, and, if the event shown is posthumous, the intrusiveness of the temple, the water environment, and the relationship of Tablet XIV to the west side of the Palace and to the Dumbarton Oaks Tablet is explained. Temple XIV is literally a cork designed to seal the Cross Group after the death of Chan-Bahlum.

The Dumbarton Oaks Tablet

To my knowledge, there is no reliable information on the provenience of the Dumbarton Oaks Tablet, and I have not seen any location within the Palenque archaeological zone from which it could have come. It is possible that it was found at one of the outlying sites in the Palenque zone, such as Xupa or Naranjo.

The composition of the tablet is related to Tablet XIV in that a ruler of Palenque (Kan-Xul II) is shown dancing while dressed in the attributes of a member of the Palenque Triad. In this case, the Triad god is GI, identified by the shell ear-piece, the shell diadem, the knots at the throat and waist, the axe held in the left hand, and the *akbal*-vase held in the right (fig. 10.9). The dancing Kan-Xul is flanked by two figures: the female is on his right, as on Tablet XIV, and the male on his left (a reversal of the arrangement of accession tablets such as the Palace Tablet and the Tablet of the Slaves). The female holds a God K manikin, as does the woman on Tablet XIV, and the male holds the personified tree that emerges from behind the ancestor portraits on the sides of the Palenque Sarcophagus. Unlike Tablet XIV, the Dumbarton Oaks Tablet identifies the flanking figures by the texts above their heads. The woman is Lady Ahpo-Hel and the male is Pacal, both of whom are named as the parents of Kan-Xul on the Palace Tablet (Schele 1979a:52–53) and of Chan-Bahlum in the Cross Group. While the water


A
B
C
D
E
F
G
H
I
J
K
L
M
1
2
3
4
5
N–Q
R–U

10.9 The Dumbarton Oaks Tablet. (Drawing by the author.)

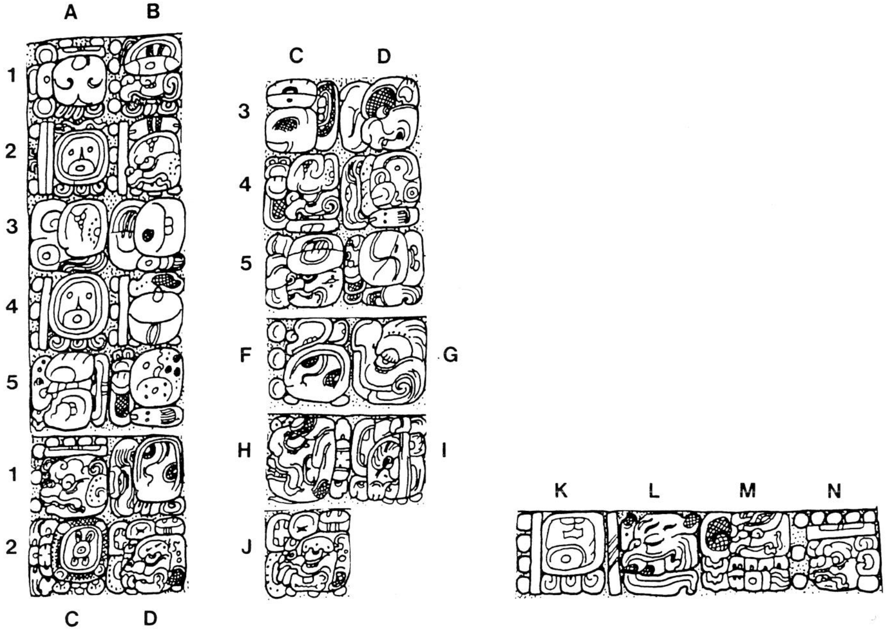
iconography of Tablet XIV is missing from the Dumbarton Oaks Tablet, ancestral concerns are marked on the Dumbarton Oaks Tablet by the presence of the personified tree and the leaf earplug (Schele 1976:14–15).

The text of the Dumbarton Oaks Tablet (fig. 10.10) is related to that of Tablet XIV. It begins with a Distance Number that leads from 12 Ahau 8 Ceh, "the seating of the *tun*" (9.11.0.0.0), to 6 Ahau 8 Cumku (9.11.4.7.0), the date of the first event. The event at A5 has been identified as an anniversary event that is substitutable for the T79 event on Tablet XIV (Schele 1978). Because these events, as recorded in the Cross Group, are now known to celebrate tropical-year anniversaries of events such as the accessions of Pacal and Chan-Bahlum, I have tested the Dumbarton Oaks date to see if a similar relationship might exist between this anniversary and some dynastically important date in Kan-Xul's past. Because of the death glyph at C5, I first tried the death date of the ancestor for whom Kan-Xul was named. The death date of Kan-Xul I, as recorded on the Sarcophagus (Lounsbury 1974a:6), is 9.6.11.0.16 7 Cib 4 Kayab. 6 Ahau 8 Cumku, the date of the Dumbarton Oaks event, is separated from this death date by an interval of 4.13.6.4, which is 92 years and 24 days. The exact number of leapdays required for 92 years is 23, so the Dumbarton Oaks date is one day after the exact tropical year anniversary, but Floyd Lounsbury (personal communication, 1980) has found good evidence that these anniversaries were linked to other astronomical phenomena as well as to the solar cycle.

The identification of the first Dumbarton Oaks Tablet event as an anniversary of death seems to be supported by the remainder of the clause. The verb is followed by the *balan-ahau* that is also found on the Altar Vase. Although it is preceded by *tu* (*ti* + *u*), identifying the glyph as a prepositional phrase or indirect object, this phrase is related to the text on the rear of Yaxchilan Stela 12 (fig. 10.11), where the dead Shield-Jaguar is recorded as the subject of an auxiliary verb + *ti* + *balan-ahau* construction. The *balan-ahau* on Stela 12 and the Dumbarton Oaks Tablet, as well as on pots, most likely refers to the state of the named person as 'deceased' or 'hidden (as in burial)' (Schele 1985a).

The subject of the verb is named as GI of the Palenque Triad, but his name is followed by *u cab* ('under the auspices of') and Pacal, the father of Kan-Xul II and ruler at the time of the event. Peter Mathews (personal communication, 1980) has suggested that the young Kan-Xul actually danced in a GI costume in celebration of the anniversary.

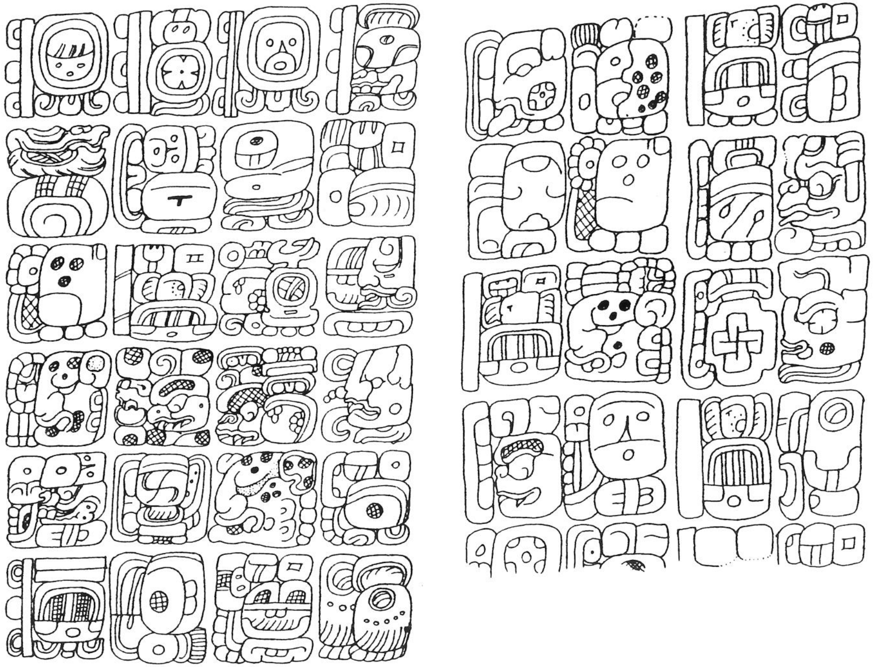
The next section of the text is difficult, because no intervening date occurs. Pacal's name is followed by a second verbal phrase, which appears to be the second component in a couplet construction. The main verb (an upright *muluc* over a *k'a* sign) is followed by two prepositional phrases with *oc* (*tu yoc*) featured in the first and a personified eccentric(?) flint in the second. The subject of the verb is clearly named at D3–G as Kan-Xul II, but there are three intervening glyphs, which may or may not refer to him. At



10.10 Main text of Dumbarton Oaks Tablet. (Drawing by the author.)

D4, the God C "blood" glyph, written as a possessed noun, is followed by a glyph for 'death,' at C5, and the *hel* compound, which has been identified elsewhere as a glyph for 'successor.' The actor is named as 'the blood of the dead one, the successor of Kan-Xul.' In an earlier stage of this study, I had considered these three glyphs to be part of Kan-Xul's name phrase—as a qualification of his posthumous state. Syntactically, however, two successive clauses such as these are much more likely to refer to the same date and event if no additional calendric instructions intervene between the verbs. Because of this prominent syntactic convention of the Palenque inscriptions, I now believe that the two initial clauses refer to the 6 Ahau 8 Cumku event, that the first clause specifies the occasion as an anniversary celebrated by GI under the auspices of Pacal, and that the second clause records the specific rite occurring on that occasion with Kan-Xul, the actor, perhaps in the guise of GI.

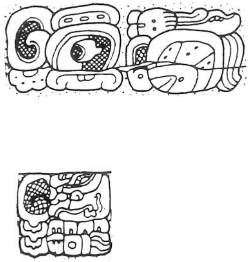
The text closes with a final date, a verb, and its agent, GI. The main sign of the verb is the same as the historical verb on Tablet XIV (fig. 10.12, *top*), although here it is qualified by God K and other affixes. This date, like that of Tablet XIV, is problematic. M. D. Coe and Benson (1966:21) tentatively placed the Calendar Round (9 Manik



10.11 Text from the rear of Yaxchilan Stela 12. (Drawing by the author.)

5 Muan) at 9.9.5.12.7 or 9.18.17.7.7, but the former date occurred before Kan-Xul's birth and the latter when he was 1.6.8.7, or 26 years old, some 31½ years before his accession to the throne. That he was a part of anniversary celebrations for his dead namesake at age 26 is understandable, but, as with the Tablet XIV event, it seems unlikely that a full tablet would have been dedicated to an event that occurred 31 years before Kan-Xul's accession. The question is, then: Does the Dumbarton Oaks date bear the same relationship to Kan-Xul's death that Tablet XIV bears to the death of Chan-Bahlum?

The death date of Kan-Xul is not recorded in the surviving inscriptions of Palenque, and his records on the Palace Tablet are very strange, because, without any record of his death, the accession of another ruler, Xoc, closes the text of the Palace Tablet. Since the deaths of Pacal and Chan-Bahlum are clearly recorded on this tablet, the absence of Kan-Xul's death and the intrusiveness of the Xoc record point to unusual circumstances surrounding the demise of Kan-Xul. Fortunately, Peter Mathews has shown me a newly found tablet from Tonina, which offers additional information



10.12 *Top*: Tablet XIV, C6–D6. *Bottom*: Dumbarton Oaks Tablet, L. (Drawings by the author.)

about Kan-Xul's death. Monument 122 shows a Maya lord (marked by the Jester God headband) reclining and bound as a captive. On his upraised thigh is a glyph panel recording him as Kan-Xul, Ahau of Palenque. The Calendar Round date recorded on this Tonina tablet is damaged, but its existence suggests that some time before the accession of Xoc on 9.14.8.14.15 9 Men 3 Yax, Kan-Xul was taken captive by Tonina lords. Assuming that Kan-Xul's death (perhaps by sacrifice at Tonina) took place shortly before this accession, the date of the final event on the Dumbarton Oaks Tablet, like the date on Tablet XIV, is several years after the death of the protagonist. The date 9.14.11.2.7 9 Manik 5 Muan is 2.5.12 after the 9.14.8.14.15 accession date. GI is named as the agent of this posthumous event, and Kan-Xul is shown dancing as GI; like the depiction of Chan-Bahlum on Tablet XIV, Kan-Xul's mother sits on his right, holding a God K manikin. God K may be specified in the second half of the verbal glyph that specifies this action. The Dumbarton Oaks Tablet, like Tablet XIV, seems to celebrate some posthumous event of a Palenque ruler, attended by one or both of his deceased parents.

THE WEST FAÇADE OF THE PALACE

Very few of the glyphs that once adorned the piers of the west façade of the Palace have survived, but the scenes of dance and decapitation, as well as the lower registers, suggest that these scenes belong to the dance complex of the previously discussed Palenque tablets and funerary pottery scenes. Piers B and F show decapitation scenes, while the lower registers of Piers C and F are marked as water environments (fig. 10.5b). The few surviving glyphs give hints of the associations of these scenes. Pacal's name phrase was recorded in the secondary text of Pier F, and the birth of the Ancestral Goddess of the Tablet of the Cross (Lounsbury 1980) is commemorated on the last pier in the series, Pier G. Pacal is clearly associated with these scenes, and, as on Tablet XIV, very early mythological events are recorded.

House D originally had eight piers on its west façade; the two outer piers probably recorded inscriptions without scenes. If we assume that the six pictorial piers displayed funerary scenes (either from the ancestral past or from contemporary history), then the occurrence of Pacal's name on one of the piers makes sense. Although House D was constructed during Kan-Xul II's reign, approximately 38 years after Pacal's death, it is clearly designed to function with the court space in front of the Temple of Inscriptions, rather than with the interior of the Palace. Pier D, originally the fifth pier in line, shows a dance in which a male is in motion before a standing female. The male wears the same "leaf" ear ornament that Pacal wears on the Dumbarton Oaks Tablet, and, although he wears no diagnostic features of either GI or GIII, he does hold an axe, recalling the posture of Kan-Xul on that tablet. The female stands facing the dancing male, profile to the viewer. Her flat-footed posture clearly shows that she is not dancing, but, like the female figure on Tablet XIV, she seems to be greeting the dancer.

The costuming of the woman is also significant. Like Chan-Bahlum's mother on Tablet XIV, she wears a "net" overskirt and cape, and a modified Quadripartite symbol marks her headdress (the surviving jeweled dragon can still be seen). Most important, she wears the Quadripartite Monster as a backrack; the stingray spine and *cimi* signs still survive. The only other female figure in Palenque sculpture to be associated with the unaltered Quadripartite Monster is the seated woman on House A, Pier C, whom Greene Robertson (in Greene Robertson, Scandizzo, and Scandizzo 1976:69) has identified as Lady Zac-K'uk, the mother of Pacal. The scenes on House D appear to be related to the funerary complex under discussion and to scenes on the burial monument of Pacal. The male figure wears an ear ornament worn by Pacal in a similar environment (the Dumbarton Oaks Tablet). The female wears accouterments associated with Lady Zac-K'uk, and the females in related Palenque scenes have been identified as mothers. I suggest, therefore, that the standing female on Pier F is Lady Zac-K'uk, the mother of the dancing male figure.

If these assumptions are correct, the Lady Zac-K'uk is participating in a dance ritual with her son that is in the same category as the dance rituals of Tablet XIV and the Dumbarton Oaks Tablet. The construction date of House D and the water environments suggest that the scene is posthumous. The dance does not occur on water, as does the dance of Tablet XIV, but the lower register of Pier E is marked by a *k'in* Sun sign, and, on the Sarcophagus lid, Pacal is shown falling into the Underworld with the Sun at the beginning of his rite of passage after death. It should also be noted that the God K scepter, so prominent on the other two tablets, has been replaced by a large snaggle-toothed serpent, whose function should be equivalent in some way to that of God K in the other two scenes.

THE POSTHUMOUS EVENTS AT PALENQUE AND THE ALTAR VASE

The Altar Vase and the posthumous tablets from Palenque share several important features. The Altar Vase is known to come from the archaeological context of a tomb, and its iconography (be it mythological or historical) is likely to refer in some way to this funerary context. Temple XIV is intrusive into the Cross Group, and it shows a water environment and dance scene that, at Palenque, is unique to it, the Dumbarton Oaks Tablet, and the piers of House D (the western side of the Palace). The text on the Temple XIV Tablet links an event in the far-distant past (945,748 *tuns* before) to an event in the contemporary history of Palenque, which is most likely, arithmetically and iconographically, to have occurred three *haabs* and one *tzolkin* after Chan-Bahlum's death. The Dumbarton Oaks Tablet shows the same dance, but Kan-Xul dances as GI rather than as GIII. On both tablets, the mother sits on the protagonist's right, holding God K, and both tablets record two linked events. The first event celebrates the 92nd-tropical-year anniversary of the death of the ancestral ruler for whom Kan-Xul was name;

it seems likely that this anniversary was celebrated by rites in which the living Kan-Xul danced as GI. The second event is written with the same main sign as the historical event of Tablet XIV; it seems to have been Kan-Xul's dance for himself after his death. The Altar Vase, known to be funerary, shows two lords, one with serpentine-feline features and one with jaguar features, dancing in an environment filled with floating and sitting supernaturals. I suggest that the dance scenes on the Palenque tablets and on the Altar Vase are related and represent parts of the same action.

Whether or not M. D. Coe's (1973, 1975, 1978) "Underworld" hypothesis is accepted by everyone in its entirety, he has demonstrated beyond doubt that many scenes on Maya Classic pottery are directly related to the cycle of the Hero Twins stories in the *Popol Vuh*. Berlin (1963) identified the glyphs of three gods (the Palenque Triad) who are critical to Palenque inscriptions and are found prominently at other sites as well as in the pottery scenes. Kelley (1965) pointed out that the births of these three gods are recorded in the first half of each of the main tablets of the Cross Group (GI on the Temple of the Cross, GII on the Temple of the Foliated Cross, and GIII on the Temple of the Sun), and Lounsbury (1980 and 1985) has gathered strong glyphic, linguistic, and ethnohistorical evidence that GI (born on 1.18.5.3.2 9 Ik 15 Ceh) was the Classic prototype of Hunahpu, and that GIII (born on 1.18.5.3.6 13 Cimi 19 Ceh) was the prototype of Xbalamque.

Whether or not the reader accepts the GI/GIII equation with the Hero Twins, these two gods are intimately associated with dance scenes on pottery. Furthermore, the two paddlers in the canoe scenes from Tikal Burial 116 are related to GI and GIII. One paddler wears a jaguar head as a distinctive trait, and GIII is the Jaguar God of Number 7 (Schele 1979b). The other paddler wears a stingray spine through his nose, but, in occurrences of this pair in the inscriptions of Copan, he wears a *xoc*-fish headdress; the barbel of GI is a feature shared with the *xoc*. GI and GIII are related to the paddlers who carry the spirit of the dead Ruler A into the Underworld, and who cavort in the upper registers of Terminal Classic monuments from the Central Peten. It is as GI and GIII that Kan-Xul and Chan-Bahlum dance on the posthumous tablets of Palenque.

Dance plays an especially important role in the story of the triumph of the Hero Twins over the Lords of the Underworld. After numerous encounters with the Lords of Death, the Twins allow themselves to be slain; their bones are ground into powder and thrown into a river. Five days later, the Twins emerge from the river and have the appearance of fish-men. They dress as beggars and proceed to perform wonderful dances and miraculous acts in which houses are burned without destruction and sacrifices are made without death. News of their performances spreads, and they are invited to perform before the Lords of the Underworld. The Hero Twins humbly accept the invitation, and, after dancing, they are ordered to sacrifice and revive a dog and a member of the audience. The Lords of Death become so excited by the performance that they volunteer to undergo sacrifice themselves. Hun Came is taken and killed first, followed by Vucub Came; but the Hero Twins do not revive the dead lords. The dance in the Underworld results in the defeat of the Lords of Death. The Hero Twins, after their triumph, exit from Xibalba and become the Sun and the Moon.

Lounsbury (1985) has recognized this "dance of sacrifice" on a vase in the Metropolitan Museum of Art (M. D. Coe 1973:vase 45), and Coe (ibid.:98) has commented on the relationship of this scene to that on the Dumbarton Oaks Tablet. The pot shows the dance with GI as the sacrificer and GIII as the victim. The same dance on the Dumbarton Oaks Tablet shows Kan-Xul as GI dancing, while on Tablet XIV, Chan-Bahlum as GIII dances.

The Altar Vase seems to show a dance of dead Maya lords in the Underworld. Here, the dance is in progress, whereas the Temple XIV Tablet and Dumbarton Oaks Tablet show the climax, the completion of the rite of passage, the triumphant exit of the dead lord from the Underworld, when he is greeted by his mother or, in the case of the Dumbarton Oaks Tablet, by his mother and father.

Other parts of the journey can be speculated on. The lid of the Palenque Sarcophagus shows the beginning of the journey, the fall, with the Sun, into the maw of the Underworld (Schele 1976). The highly directional composition points to the north, and Pacal's head is in the north (as is that of every burial recorded at Palenque). In the Cross Group, the north tablet (the Tablet of the Cross) records the births and accessions of the mythological, legendary, and historical dynasty of Palenque, that is, Chan-Bahlum's ancestors. At Tikal, not only is the North Acropolis the figurative location of the ancestral dead, but the dead are quite literally there in numerous tombs.

If this interpretation of the dance iconography is correct, Temple XIV would have been constructed by Kan-Xul to serve much the same function as Temple 33 did in the North Acropolis at Tikal. Both buildings cork ceremonial spaces used by a previous ruler or earlier members of a dynasty (the North Acropolis is entirely of Early and Middle Classic construction [W. R. Coe 1967:41–50]). The placement of Temple XIV seems to be related to the practice of killing pottery before it is put in tombs, or to the construction of new, superimposed buildings. Temple XIV breaks processional access to the Cross Group as a means of containing the spirit or force of the space created by the dead Chan-Bahlum. Because its original location is unknown, it cannot be ascertained if the Dumbarton Oaks Tablet occupied a similar kind of obstructive building, but I suspect that it did.

Temple XIV is located in the west, and Chan-Bahlum dances out of the west. I suggest that, upon his exit from Xibalba, he took his place as an ancestral lord in the northern sky, the featured horizon at Palenque.

ACKNOWLEDGMENTS

I should like to acknowledge the invaluable contributions of Dieter Dütting and Floyd Lounsbury to the ideas and interpretations presented in this paper, which are the direct result of lengthy discussions among the three of us, after the Tercera Mesa Redonda de Palenque, about the placement in the Long Count of the historical date of Tablet XIV. My two colleagues argued that this date was posthumous, and the realization that the event pictured on Tablet XIV was posthumous was the key to the interpretations of the iconography of the Palenque tablets and to the placement of Temple XIV.

11

MARY E. MILLER

The Boys in the Bonampak Band

Investigations of ancient Maya music always include the troupe of musicians from the Bonampak murals as the prime example. Without doubt, the depiction of this group is the finest pictorial record of Pre-Columbian music. Rather than using it as an illustration of Maya music, however, I would like to explore the Bonampak band as a complete musical ensemble. In doing so, I will attempt to develop the model of the Classic Maya musical band, seen not only in the Bonampak murals but also on Late Classic polychrome ceramics.

On all four walls of the lower register of Room 1, Structure 1, Bonampak, a procession marches, forming a single scene. J. Eric S. Thompson discussed it in the Carnegie Institution of Washington volume on Bonampak and considered it "the first main event in the drama."

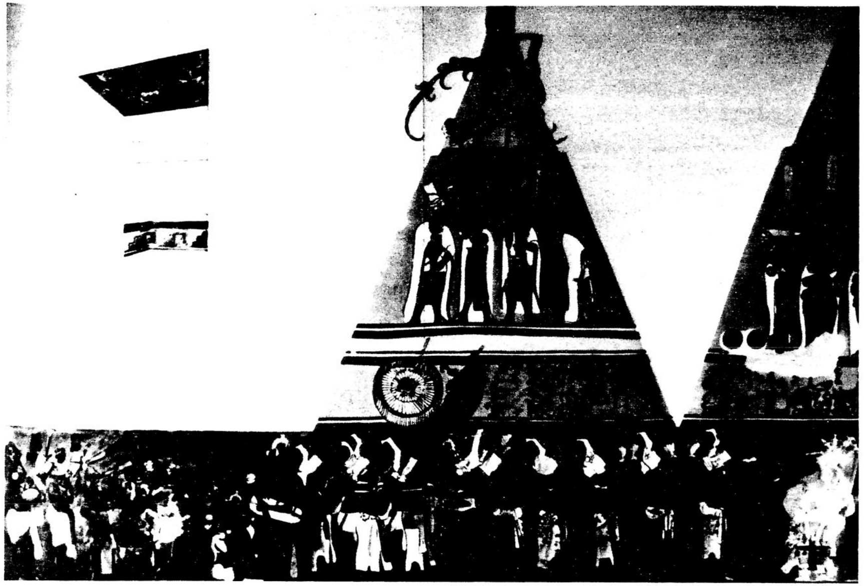
> The scene, then, represents the start of a ceremony, probably a dance but perhaps a mystery play. The musicians' overture is the prelude; the impersonators of the gods await their cues; the halach uinic and his entourage are onlookers. (Ruppert, Thompson, and Proskouriakoff 1955:50)

As I interpret Room 1, the procession and the explosion of music is the final event in that room. This celebration follows the presentation of the little heir on the upper register. A larger block of time marks the distance between the events in Room 1 and the events in Room 2. The events in the rooms are related, but each room has its own internal coherence.

The eastern side of the procession in Room 1 is marked by music (figs. 11.1–11.3). Twelve individuals form the Bonampak band. A single member of this group is named *ah na:ab*, a courtly title frequently associated with painting, daubing, or dressing. Six others, dressed in costumes unique in Maya art, sit and stand in the northeast corner. Behind the turtle-shell players stand two parasol-bearers, visible only as hands, lower torso, and legs. The western side of the procession is apparently less audible. Five of these persons are named *ca* or *cahal*, a title borne by secondary tribute-bearing lords elsewhere, some of whom rule subsidiary cities. The lords on the western side of the procession may speak or sing, but they are undoubtedly present to demonstrate their loyalty to the Bonampak king. The two parasol-bearers are now completely visible, and the remaining eleven persons are more dispersed than the procession members on the side with the band.

Thompson called the troupe of musicians an orchestra, but I shall refer to them as the Bonampak band. *Orchestra* suggests a stationary, mostly seated group of musicians, and, in the traditional definition, it includes strings. The word orchestra originally meant the section of the stage where the Greek chorus performed. Insofar as it is possible, I would like to avoid presenting the Bonampak murals as theater. *Band* has the outdoors, mobile connotation that suits the Bonampak procession.

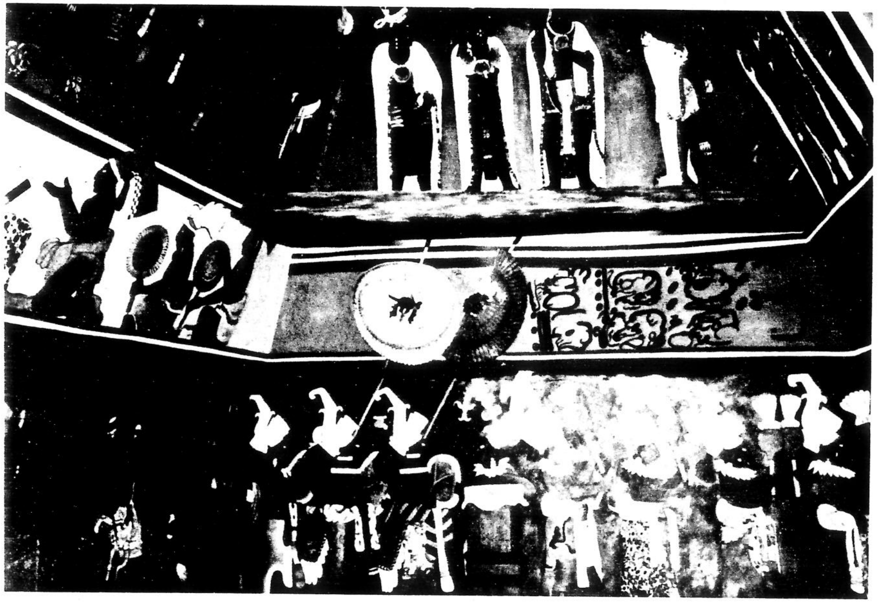
The Bonampak band is the most comprehensive musical band known from Classic times. According to Landa's (1941:93) description, musical bands of the sixteenth century varied little from the Bonampak one: the Yucatecan band included two kinds of drums, trumpets, tortoise shells, whistles, flutes, and conches. Postclassic and post-Conquest Central Mexican manuscripts often depict musical bands, and they too show remarkable similarity to the Bonampak band. Through an examination of the Bonampak band, I hope to show that musical bands on Classic Maya polychrome vessels



11.1 Bonampak, Room 1. (Copy by Antonio Tejeda. Photograph courtesy of the Peabody Museum, Harvard University.)

are often conflated and abbreviated, suggesting but never including the full complement.

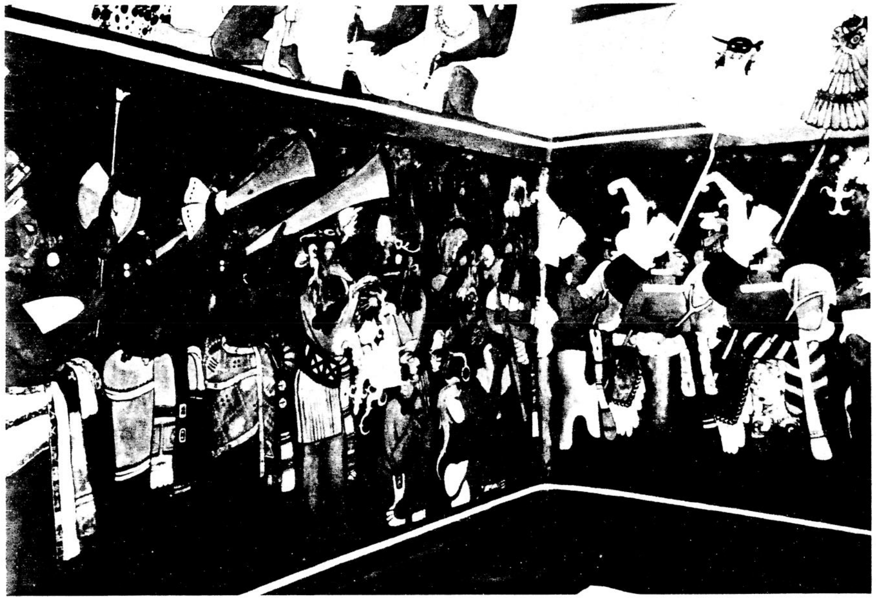
The Bonampak band is led by five gourd-rattle players, followed by a drum-player and then three turtle-shell players (fig. 11.1). These nine musicians wear similar costumes, variations on a single theme, like the white robes of the fourteen large lords of the upper register. It is as if band members had been told to wear dark trousers and white shirts. No two figures wear identical costumes (in contrast to the three principal lords, who, in fact, wear a uniform), but together they form a group. The basic outfit includes a hide skirt, painted with designs that resemble those of polychrome vases, and a rolled hipcloth, draped like a sausage around the waist. Each of these musicians also wears a stiff, white headdress, perhaps made of woven palm fiber or white straw. Such a construction suggests a Pre-Columbian Panama hat. The shape of all these headdresses resembles the upper snout of some saurian beast. The fully elaborated form of the headdress, with the attached nibbling fish, characterizes the personification of the number 13, another supernatural patron of the arts, and is appropriate for participants in this scene of music and dance. From the rear of each headdress falls a thatch of green feathers, probably from the quetzal but not its long tail feathers.



11.2 Bonampak, Room 1. Musicians. (Copy by Felipe Dávalos. Photograph courtesy of the Florida State Museum, Gainesville.)

The five gourd-rattle players make different movements, almost showing a frame-by-frame cinematic record of how such rattles are shaken. The deerskin skirts of all five are well-preserved, and Felipe Dávalos has reconstructed them accurately in the copy made for the Florida State Museum (fig. 11.2). The skirt of the last player shows a black and orange serpent head, not unlike the serpents on the "Black Background Vase" (Robicsek and Hales 1982:cover). The figure in front of him wears a hide painted to suggest a feline pelt. Like those of all members of this group, his hipcloth has been tied into a tight pod. This one and the one of the player in front of him bear painted glyphs. The first member of the group wears a skirt painted in colors that resemble the tonalities of low-fire Maya ceramics. On it is portrayed a single Maya supernatural, who is not identifiable. He wears the large knotted pectoral typical of GI and GIII of the Palenque Triad. His eyes are large, square, and crossed, and he has no lower jaw.

The drummer has gone as far as he is going; the *huehuetl* is not an easily portable instrument (fig. 11.2). Like a long musical rest, the drummer has stopped movement forward. He is fixed behind the stationary instrument and looks back at the members of the procession who follow. The headdress of the last rattle-player links around the



11.3 Bonampak, Room 1. Detail, north and east walls. (Copy by Felipe Dávalos. Photograph courtesy of the Florida State Museum, Gainesville.)

11.4 *Huehuetl.* (After Saville 1925:pl. XVI.)

drummer's, as if to pull the recalcitrant along. To soften the stop in the rhythm personified by the drummer, his headdress has a fish-nibbling-flower motif, positioned to repeat the profile of the headdresses in front of him.

The drummer plays a *huehuetl* similar in every detail to the surviving examples known from the Aztec (fig. 11.4). The Bonampak drum is the earliest dated example, although similar ones occur on Maya vases. Formally, the *huehuetl* is essentially a huge Teotihuacan-style tripod vessel, suggesting that this drum was a highland invention, probably of Teotihuacan date, although no *huehuetl* survives in Teotihuacan imagery.[1] The Teotihuacan *talud-tablero* architectural profile is repeated in the open cuts of the base of the drum, and the distinctive shape of the supports may provide a necessary resonance. Once invented and developed for use in a standard repertory, musical instruments change slowly, if at all. Although perhaps related to Teotihuacan pots, the *huehuetl* survived intact for at least seven hundred years, long after anyone could remember who had lived at Teotihuacan.

Behind the drummer follow three turtle-shell players, each striking his instrument with a deer antler. This pairing is known both from ethnohistorical sources[2] and from archaeology.[3] The turtle-shell players wear the same basic costume as the preceding six musicians, but for the Florida State Museum copy (fig. 11.3), Dávalos reconstructed the design on the hide of the first of the group, borrowing a figure from a painted vessel at Dumbarton Oaks.[4]

Separated from the group of six in costume that Thompson called "impersonators" are the two trumpeters, who bring up the rear of the band (fig. 11.3). They are separated not only by the intervening individuals but also by their costume, which is less elegant than the garb of the group in front. They wear hip- and loincloths of almost identical coloration. Landa mentioned gourd trumpets, but I suspect that the ones played in the Bonampak murals are of wood, as Thompson suggested. Behind the trumpeters is a single individual, perhaps an instrument player, or perhaps a human metronome who keeps the beat. His green loincloth is decorated with glyphic completion signs, as if to describe his position in the procession.[5]

Sandwiched between the two groups of musicians is the group of six persons in exotic costume. They have long been the most popular figures in the Bonampak mu-

---

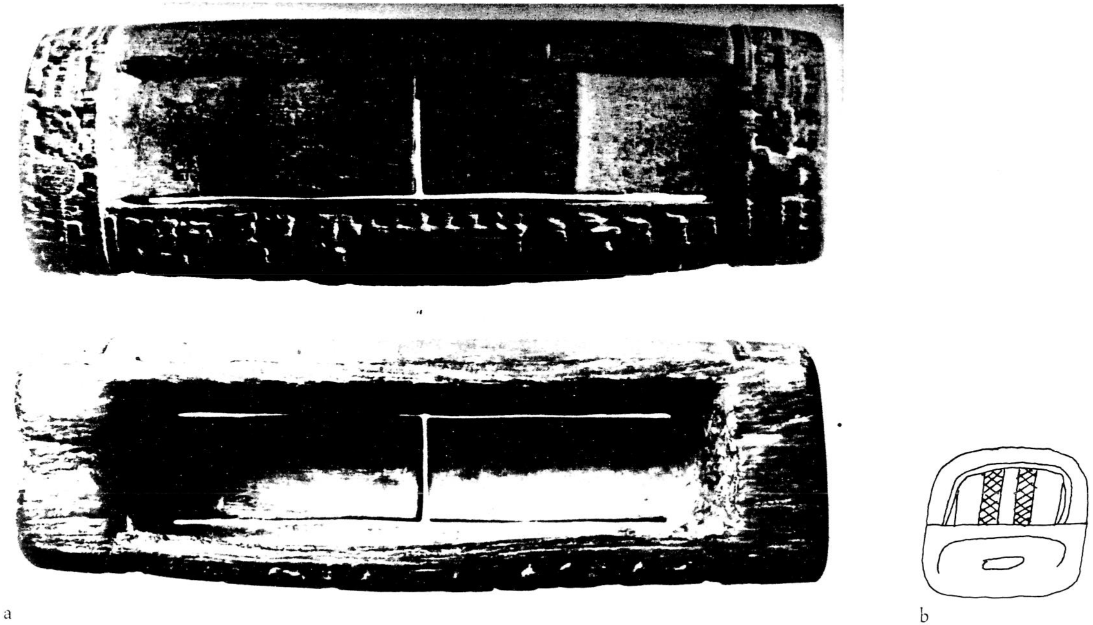
[1] Anne-Louise Schaffer and Carlos Arostegui both pointed out the formal similarity between the *huehuetl* and the tripod vessel.

[2] Thompson cites the main ones in Ruppert, Thompson, and Proskouriakoff 1955:60.

[3] For example, in Tikal Burial 10 (Coggins 1975:145) or Kaminaljuyu Tombs A-III and A-IV (Kidder, Jennings, and Shook 1946:53–61). This evidence suggests to me that musicians accompanied the body to the tomb, laying down instruments as offerings.

[4] The figure Dávalos chose comes from Dumbarton Oaks Vase 11 (M. D. Coe 1975), but he reversed it for the composition here. The choice was far from arbitrary; Dávalos drew the roll-out illustrations of the incised vessels for the same folio.

[5] Hammond (1972:129) suggests that this figure plays a pottery drum.



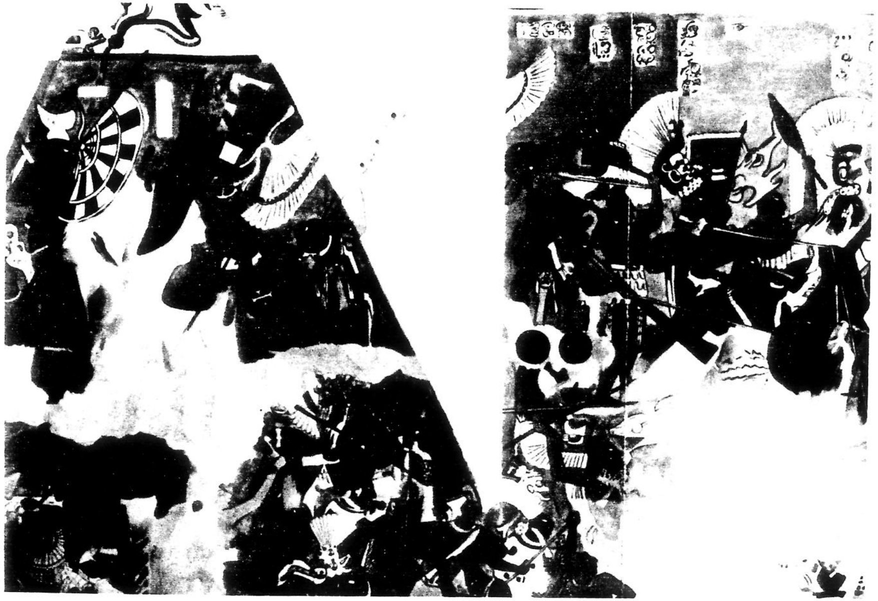
11.5 a. *Teponaztli.* (After Saville 1925:pl. XXIX.) b. *Tun* glyph. (Drawing by the author.)

rals. For Thompson, they determined the meaning of Room 1. They cannot be identified with any known Maya supernaturals, and that fact leads me to make a radical statement: they may not be very important. This group is tucked into a corner and painted in colors that blend together and then recede into the blue background. They are in striking contrast to the musicians, whose white headdresses mark their presence like staccato accents. Thompson (in Ruppert, Thompson, and Proskouriakoff 1955:50) identified these masked individuals, along with the central figures, as the *Bolon-ti-ku*, the nine lords of the earth, but his argument rested on three debatable points: (1) that individuals in mask and costume are impersonators of gods, (2) that the main significance of the waterlily is "abundant earth" and that it is the determining factor here, and (3) that the figure closest to the turtle-shell players represents a personification of the number 5, or Mam.

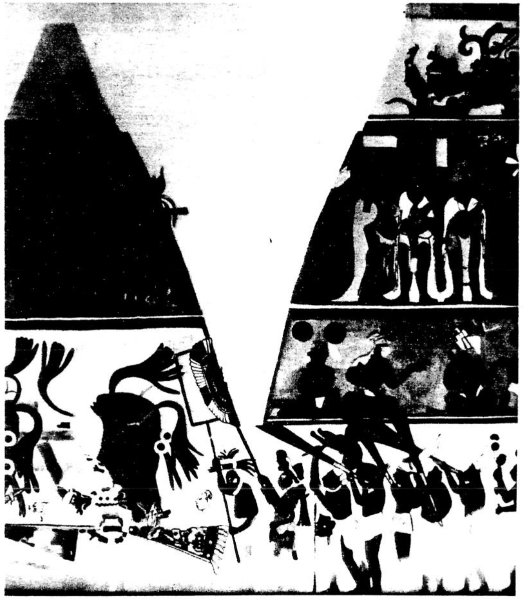
The position of and the object carried by the first member of this group suggest a musical role. He is placed across the corner junction of the room, and, more than any other figure in this group, his turned body relates to other figures in the room, yet visually it leads back to the band members, unifying the composition by providing a transition between groups.

This is the personage Thompson named as the Highland god Mam, the god of the number 5, an identification based on his carrying a *tun* sign (figs. 11.3, 11.5b). Although the object he carries does resemble the *tun* sign, it also varies from it. The standard *tun* sign has two dark vertical bands slicing the upper division, and the object depicted here has three—yet a fourth may be under the arm. In his left hand, the figure carries a stick.

Not included in the Bonampak instruments is the *teponaztli*, the constant partner of the *huehuetl* in Aztec musical ensembles. According to post-Conquest Maya records, the two drums were always paired in Yucatan as well and were known as the *pax* (*huehuetl*) and the *tun kul* (*teponaztli*) (Landa 1941:93). The *teponaztli* is a hollow wooden cylinder, played horizontally, with an I-shaped sounding hole (fig. 11.5a). I suggest that this horizontal drum is what the masked character carries. It is true that the incision known at the time of the Conquest does vary from the three stripes of the object in the mural, and that the stick is much larger than the small rubber-tipped mal-



11.6 Bonampak, Room 2. Trumpets, east wall. (Copy by Antonio Tejeda. Photograph courtesy of the Peabody Museum, Harvard University.)



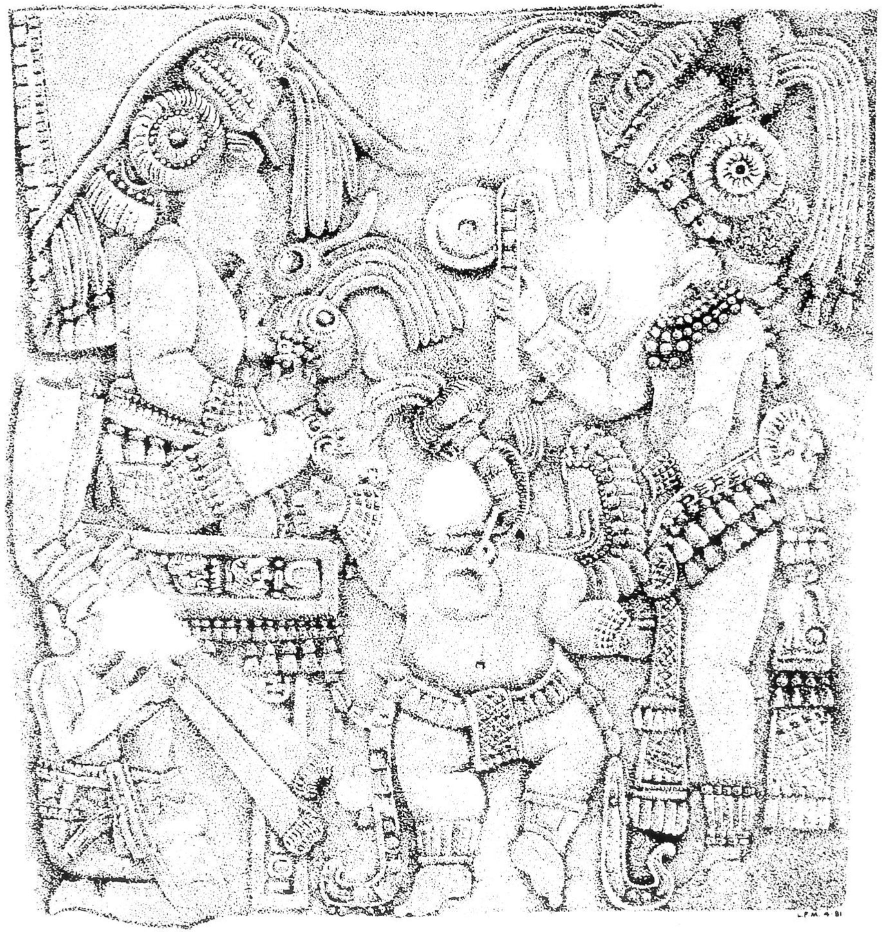
11.7 Bonampak, Room 3. Musicians, west and north walls. (Copy by Antonio Tejeda. Photograph courtesy of the Peabody Museum, Harvard University.)

let used to play the *teponaztli*. Nevertheless, the interpolation of the masked men between undisputed musicians raises the possibility that these objects had a musical role.

We may be looking at a pun. The instrument carried has been drawn to resemble the *tun* glyph (fig. 11.5b), and the Maya word for *teponaztli* is *tun kul*. The object may identify itself. This identification remains hypothetical, because no Maya *teponaztli* is recorded before post-Conquest times, but its presence here would give greater definition to the masked characters and also would complete the musical ensemble.

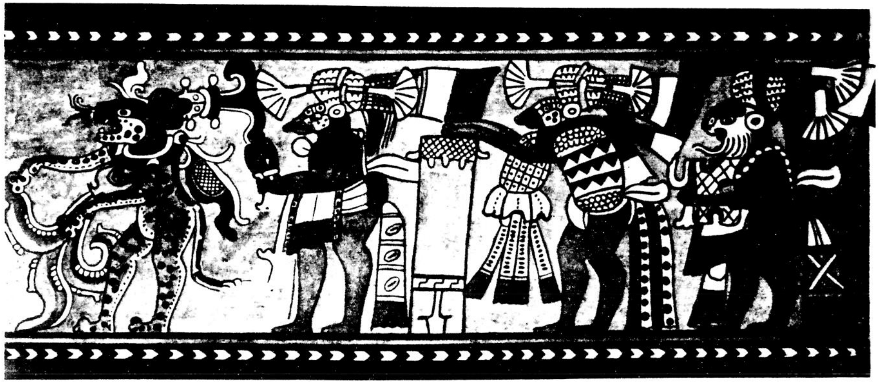
Musicians occur in two more instances in the Bonampak murals. In Room 2, trumpets alone are played (fig. 11.6). In Room 3, the order of the Room 1 musicians is repeated by a larger crowd on two distinct planes: first, there are rattles and then the *huehuetl*, borne on a litter and played by a dwarf (fig. 11.7); separated in space, on a lower level, trumpeters bring up the rear. New players replace the musicians of Room 1, but the configuration of the band remains constant.

Musicians are not very common in surviving Maya art. To my knowledge, they appear only once on monumental stone sculpture, on a column from Champoton, now in the Campeche Museum (fig. 11.8). They figure far more frequently on Maya pol-

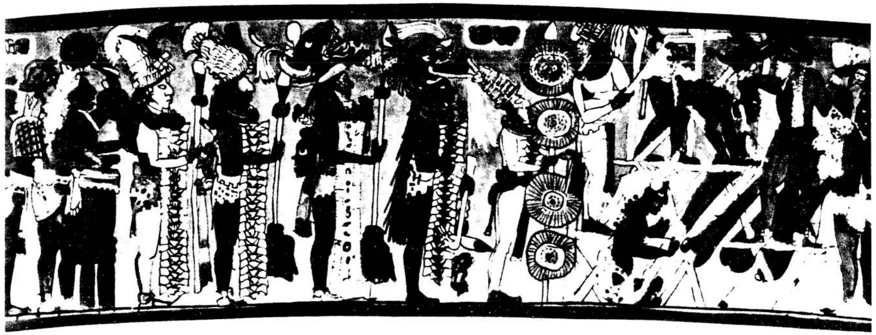


11.8 Column, found at Champoton. (Museo Regional de Campeche. Drawing by Larry Mills.)

ychrome pots (figs. 11.9–11.14). From the evidence in other places, the Room 1 musical band would seem to be the complete ensemble of which all other representations are only fragments. In my examination of other musical bands, I find two principles emerging. The first is that trumpets are independent of other instruments, often appearing alone or separated. More important, however, is the order that all musical bands seem to reflect: rattles, *huehuetl*, turtle shells, trumpets. One begins to have the sense that the order of musicians was as standard among the Maya as the formal order of musicians is today. Were I to say first violin, we would all know where to look in the



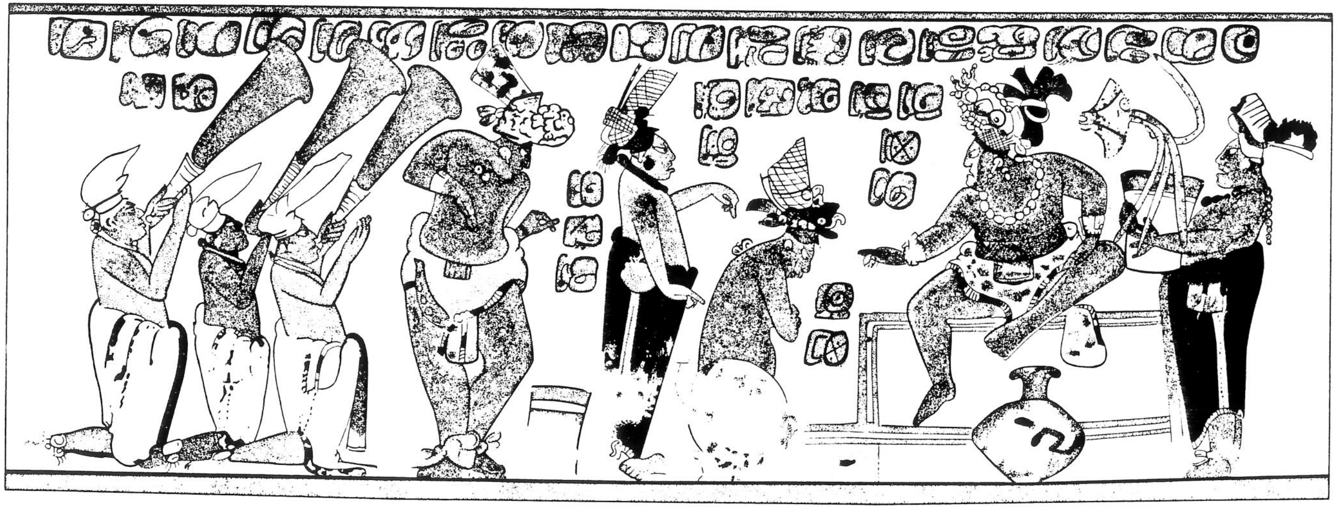
11.9 Chama vase. (After Dieseldorff 1926:Taf. 22.)



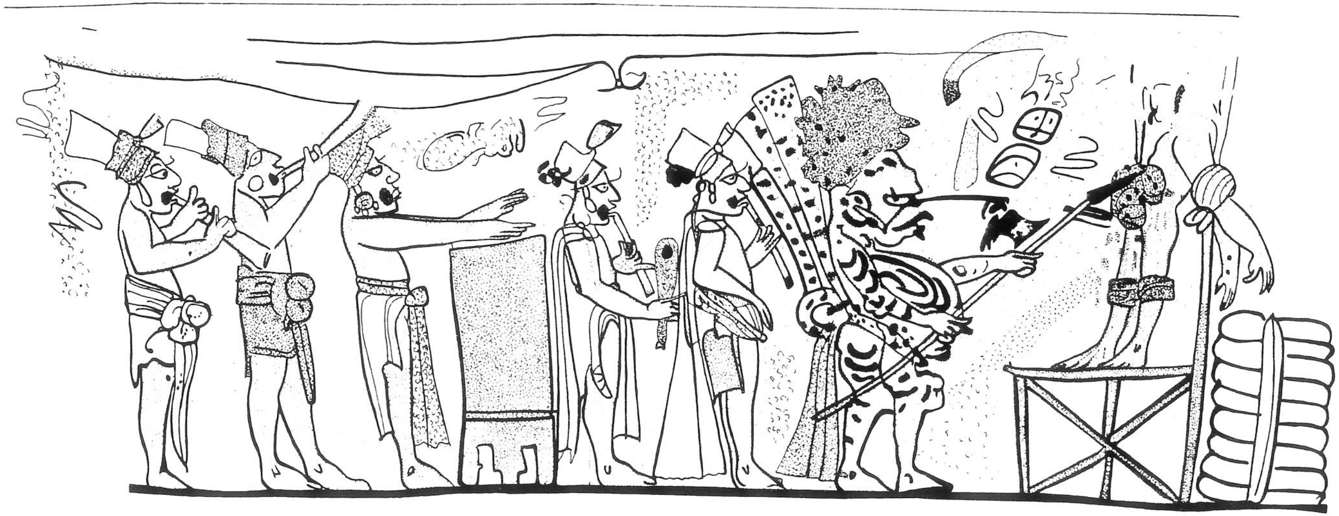
11.10 Cylindrical vase. (Dumbarton Oaks. Roll-out drawing by Diane Griffiths Peck after M. D. Coe 1975:no. 16.)

orchestra. The position of piccolos and percussion is absolutely predictable in the Yale marching band.

On Maya vases, we can affirm that the Bonampak order of musicians is standard. Several vases of Chama style lucidly repeat the Bonampak order. In all cases, the musicians are supernatural animals, but their departure from normal reality does not interrupt the processional order (fig. 11.9). The usual Chama band includes only three musicians: one with rattle, another on the *huehuetl,* and the last on the turtle shell. The musical vase at Dumbarton Oaks exhibits the broader repertory of Bonampak. Rattle, drum, and turtle shell are shown in sequential procession, while the trumpets face the other direction, demonstrating their separateness from the other instruments (fig. 11.10). This vessel probably depicts gourd trumpets, two of which have no visible



11.11 Cylindrical vase, roll-out drawing. (After M. D. Coe 1973:no. 31.)



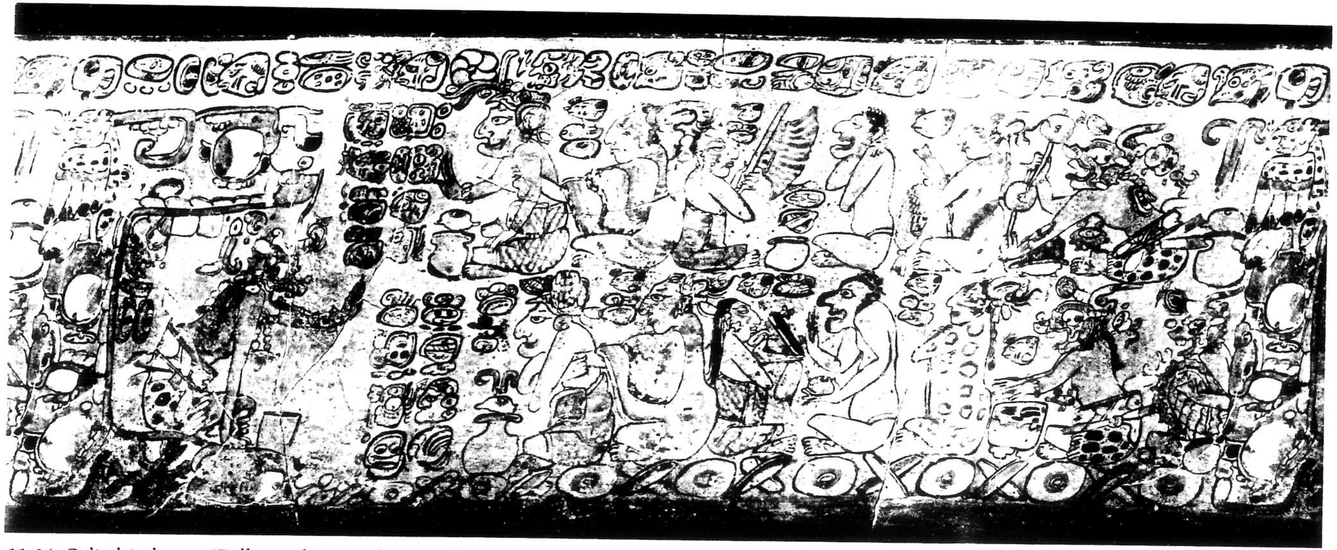
11.12 Cylindrical vase, roll-out drawing. (After M. D. Coe 1973:no. 33.)

11.13 Cylindrical vase. (After M. D. Coe 1973:no. 36.)

players. Three vessels shown together at the Grolier Club in 1971 include musicians. The first has only trumpets (fig. 11.11). The vessel in figure 11.12 sandwiches flutes between rattles and *huehuetls;* flutes do not appear at Bonampak but are known archaeologically. The third Grolier musical vase shows turtle shell and drum reversed; the trumpets are seen, but not their players (fig. 11.13). In a vase of dramatically different style (fig. 11.14), an abbreviated band comprises three "rain beasts." Apparently providing a musical background for the accompanying scene of ritual enemas, the trio plays rattle, drum (although the drum is tripodal, like the *huehuetl,* it is very small), and turtle shell, in that order, if we read from top to bottom, as the Maya undoubtedly did.

The sample of musical bands is small. On other vases, a single musician may appear. There are a few separated musical groups as well, but they offer little additional information.

The sight of Maya musical bands must have been splendid, a feast of costume as well as of sound. The *huehuetl* must have been carried on a litter or set down where the other musicians could take their places on either side of it. Although the *teponaztli* does not occur anywhere else in Classic Maya art (raising the possibility of its misidentification at Bonampak), the character who plays it also is not found elsewhere. I would like to imagine Maya musical bands parading at many Maya sites, the full complement including rattles, *huehuetl*, turtle shells, *teponaztli*, trumpets, and maybe a final rattle, all in predictable order. The visual record allows us to reconstruct the marching band.



11.14 Cylindrical vase. (Roll-out photograph copyright Justin Kerr, 1981.)

12

A Study of Classic Maya Scaffold Sacrifice

KARL A. TAUBE

This study investigates a type of sacrifice in which the victim is bound to an upright wooden form and then pierced with spears, darts, or arrows. The wooden support ranges from complex multi-beamed structures to single posts and even trees. I will discuss the ceremony as a scaffold sacrifice—its most developed ritual form—bearing in mind the probable symbolic meaning of the scaffold as a tree. There is considerable variation in the basic configuration of the Mesoamerican scaffold sacrifice. This study focuses on Classic Maya forms of the ceremony, although Central Mexican data will be included when relevant. There appear to be two basic thematic orientations of the Classic Maya rite, one concerned with the vernal renewal of the fields and the other with royal accession ceremonies. While it might appear that these are disparate ceremonial themes, it will become evident that they share a great deal of symbolic imagery and meaning. By studying the basic seasonal significance of the scaffold ceremony, we are better able to understand its presence in Classic Maya elite art and ritual.

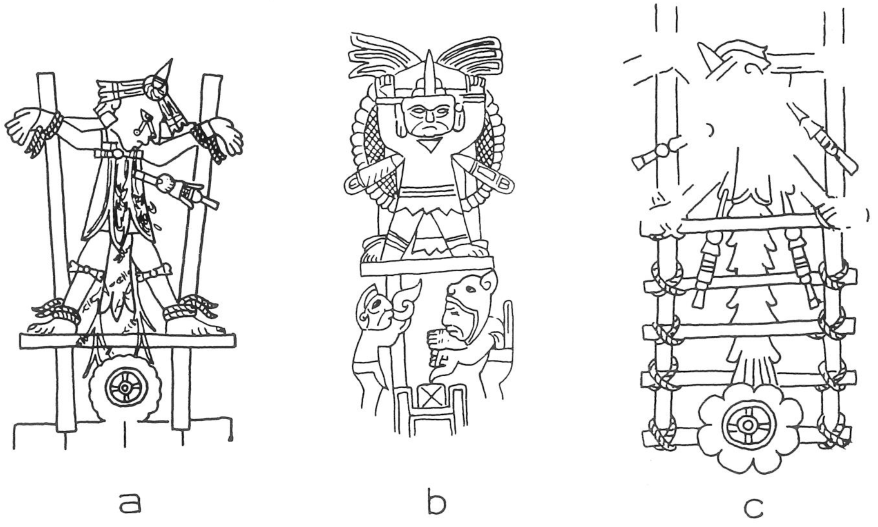
THE YEAR-RENEWAL SACRIFICE

Until recently, the primary evidence of Maya scaffold sacrifice has come from a number of terse ethnohistoric accounts[1] and a crudely incised Tikal graffito (Maler 1911: fig. 10). Because of this relative paucity of data, the Maya rites have been studied far less than those of Central Mexico. One of the best-known Central Mexican scaffold sacrifices was held during the *veintena* festival of Tlacaxipehualiztli. This was the festival of Xipe Totec, the flayed god of spring and earthly renewal. Seler (1963, vol. 1:131–132) noted that there were two forms of sacrifice performed during these rites, the gladiatorial execution upon the *temalacatl* disk and the scaffold rite of Tlacacaliliztli. In the scaffold sacrifice, the victim was bound upright, with his arms and legs outstretched and tied to two flanking wooden posts. Usually the posts had lashed between them a series of crossbeams that created a crude ladder and platform for the victim (fig. 12.1). The victim was killed with darts or arrows, the blood falling upon the earth from the body and the posts.

---

[1] Some of the better-known ethnohistoric accounts can be found in Chinchilla-Aguilar (1951), Landa (1941), and Recinos and Goetz (1953).

Seler (ibid.) called attention to the fertility symbolism of the Tlacaxipehualiztli rites and suggested that the spread-eagle posture of the scaffold victim represented the female in coitus, with the projectile symbolizing the impregnating phallus. Seler also noted, however, that the piercing represented the planting of the fields, the spear being the digging stick and the body the earth. Although he remarked on the fertilizing nature of the falling blood, Seler did not associate it directly with the rains issuing soon after the planting. This was later noted by Saville (1929:173), who wrote that "the blood streaming to the ground was symbolic of the desired copious rainfall, with consequent abundant crops." The sacrifice seems to have contained yet another symbolic theme, that of the hunt. The captive warriors were killed with projectiles in much the same way that game was slain. Nancy Troike (1979) has noted that scaffold sacrifice was closely associated with Mixcoatl and Camaxtli, Central Mexican deities of the hunt. Xipe Totec seems also to possess certain attributes of game. As the flayed god, Xipe wears a human skin cut and pulled from the victim in much the same manner that is used to skin an animal. Moreover, on Zapotec Monte Albán III urns, Xipe can be seen



12.1 Central Mexican representations of the Xipe Tlacacaliliztli sacrifice, Late Postclassic period. a. Detail of Mixtec Tlacaxipehualiztli ceremony. As in figure 12.1c, the victim's blood pours on a turquoise-rimmed pyrite mirror; such mirrors often occur as *tezcacuitlapilli* back mirrors on Toltec warriors. (Nuttall Codex, p. 84.) (Drawing by the author.) b. Detail from carved and gilded *atlatl*, of possible Mixtec origin, with conch-blower and jaguar impersonator at the base of the scaffold. The petaled back disk is possibly analogous to mirrors in examples a and c. (Museo Nazionale ed Etnografico Luigi Pigorini, Roma. Redrawn by the author after Easby and Scott 1970:fig. 293.) c. Detail of Mixtec Tlacaxipehualiztli ceremony. (*Codex Becker I*, p. 10.) (Drawing by the author.)

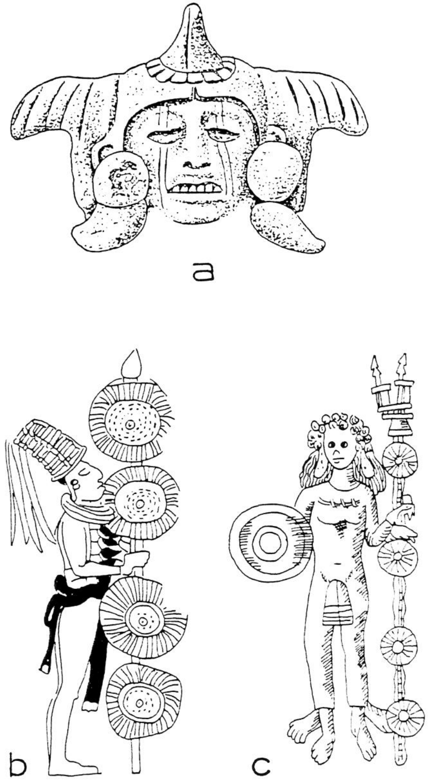
wearing horns of twisted hair (fig. 12.2a), and, on a number of Period III urns, the god wears a headdress of one or several deer heads in profile.[2]

Because a corpus of Classic Maya vases is now available for study, it is possible to gain substantial insight into the form and significance of the ancient Maya sacrificial rite. One of the most important Classic Maya scaffold scenes occurs on a polychrome vase in the Dumbarton Oaks Collection (fig. 12.3). In this study, it will simply be called the Scaffold Vase. As I have suggested previously (Taube 1979, 1980), the scene appears to represent the scaffold sacrifice of a deer-man. The victim has his hair pulled in the form of antlers, so that it looks much like the Zapotec examples of horned Xipes. The polychrome scene shares with Aztec Xipe imagery a striking feature: the elaborate lance held by one of the flanking attendants (fig. 12.2b). A markedly similar lance, which also has four large roundels, is carried by a Xipe figure in the Florentine Codex (fig. 12.2c).

It appears that, like the Central Mexican Tlacaxipehualiztli ceremony, the Classic Maya scaffold sacrifice was a vernal rite concerned with matters of agricultural renewal, such as the planting and the rains. An additional Maya detail found on the Scaffold Vase is the burning of the deer-man's back-cloth.[3] Since, like Xipe, the deer-man seems to represent the earth, this torching might symbolize the burning of the fields just before the spring planting and rains. Thus, the sacrifice may represent three distinct agricultural processes: the torching of the victim's back, the milpa burning; the spearing of his flesh, the planting; and the flowing blood, the rains.

A number of unprovenienced figurines, reportedly from Jaina, represent individuals mounted upon scaffolds. Kellers (1974, vol. 2:figs. 61, 269) illustrates two examples of this unusual type. The first depicts two individuals upon the scaffold, one bent over in the quadruped stance of the Scaffold Vase victim. The second example portrays a single male upon the wooden frame. Instead of having hair bound in the form of antlers, as the Scaffold Vase figure has, this individual wears a deer headdress. Marilyn Goldstein (personal communication, 1979) called my attention to a third example, in which the figure both wears a deer headdress and is posed in the quadruped stance (fig. 12.4).

The identification of the scaffold victim with hunted deer existed not only among the Classic Maya but among the proto-historic Yucatec as well, as can be seen in the *Chilam Balam of Chumayel* account of the scaffold sacrifice of Ix-Tziu-Nene and his followers.



12.2 Xipe costume and paraphernalia. a. Xipe head, from Period III Zapotec urn. Compare the headdress with the Postclassic example in figure 12.1a. (Redrawn by the author after Boos 1966:fig. 411.) b. Sacrificial attendant from the vase in figure 12.3. (Redrawn by the author after M. D. Coe 1975:vase 16.) c. Aztec Xipe impersonator. (Redrawn by the author after Sahagún 1950–1963, bk. 2:fig. 2.)

---

[2] Boos (1966:figs. 358–360) illustrates a number of Xipe urns with headdresses that he identifies as bird heads. Because of their ears and profiles, it is more likely that they represent the flayed facial skins of deer. Parsons (1980:fig. 214) illustrates another Xipe urn with a single unflayed deer head in profile.

[3] There is a remarkable Jaina representation of a scalped and screaming captive wearing a bundle of faggots on his back (see Schele and M. E. Miller 1986:pl. 94). As in the case of the scaffold scene, it is probable that the victim's back is to be burned. The association of fire bundles with captives will be discussed in detail below.

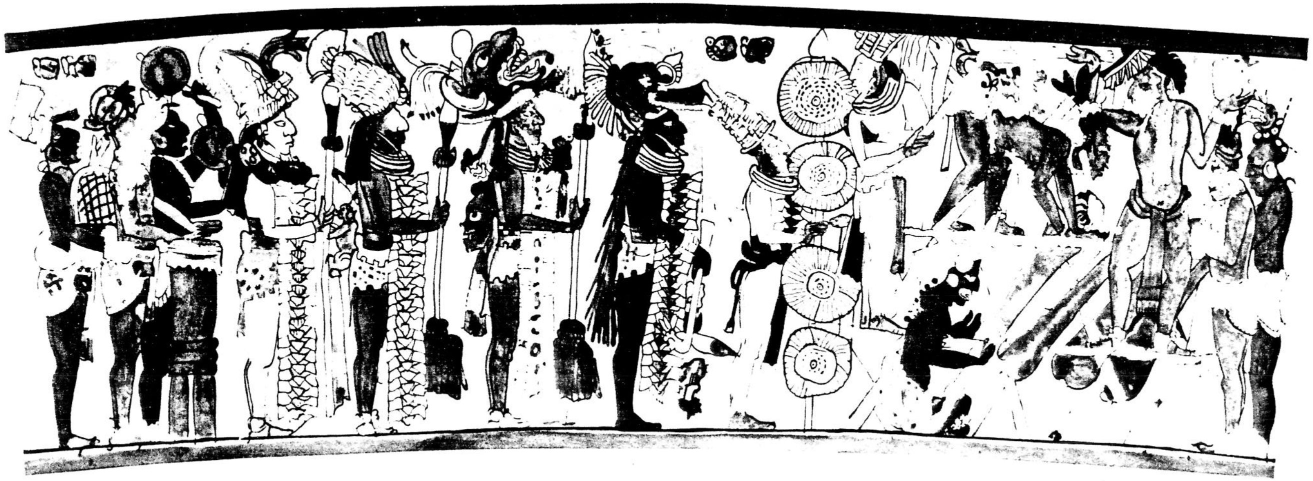
> It was Ix-Tziu-Nene who introduced sin to us, the slaves the land, when he came. . . . Then the law of another katun was introduced, at the end of the katun when Ix-Tziu-Nene was brought. Whereupon a numerous army was seen, and they began to be killed. Then a thing of terror was constructed, a gallows for their death. Now began the archery of Ox-halal Chan. Then the rulers of the land were called. Their blood flowed, and it was taken by the archers [*ah-cehob*]. (Roys 1967:76–77)

Roys (ibid.) notes that the term *ah-cehob* probably signifies 'hunters' and is used in contrast to the conventional word for warriors. More specifically, the individuals may be described as "deer-hunters," as *ceh* signifies 'deer' in Yucatec. Thus, the executioners were identified as deer-slayers and the prisoners as their prey.

Landa (1941:162) describes two protohistoric rites that may be analogous to the Classic deer-man sacrifice. These are the *Tup Kaak* rain rituals that occurred in the spring months of *Mac* and *Pax*. The *Mac* ceremony began with an actual hunt in the woods "for all the animals and creatures of the field." After the game was brought back, their hearts were removed and cast upon a large bundle of sticks set upright. When all the hearts were burned, water was poured onto the smoldering remains, hence, the term *Tup Kaak*, 'to put out the fire' (ibid.:162–163). On the Scaffold Vase, one of the individuals burning the victim's back also holds a vessel in his right hand. He is probably holding liquid with which to douse the fire. Like the sacrifice of the Classic deer impersonator, the protohistoric *Mac* ceremony may also reflect basic vernal events, the burning of the fields as well as the following rains.

Landa (ibid.:165) states that a variant of the *Tup Kaak*, a ceremony that occurred in mid-May during the festivals of the month *Pax*, was probably also held to bring rain, since, Landa notes, the *Pax* rites were called *Pacum Chac*, which Roys tentatively translated as "recompense the rain god" (ibid.:164). The fire offering in *Pax*, however, occurred after five days and nights dedicated to ceremonies of war and to the god Cit Chac Coh, 'Father-red-puma' (ibid.). During the five days, a dance called the *holcan okot*, or 'dance of the warriors,' was performed. This was possibly the dance in which trophy parts of slain foes were worn "as tokens of victory" (ibid.:120). After the five days and before the fire offering, a major ceremony was performed. Although Landa does not describe the event, he notes that it was a somber affair, "as it concerned matters of war and gaining victory over their enemies" (ibid.:165).

Although Landa states that a *Tup Kaak* was performed in the month of *Pax*, he does not specify what was offered. Considering the strongly martial nature of the *Pacum Chac* festival, it could well be that this rain offering did not entail the hunting of animals but the capture and sacrifice of men. At the Campeche site of Tohcok, there is a painted doorjamb that depicts a spiked censer containing a slain victim and burning bundles of wood (fig. 12.5a). Above the victim dances a warrior, painted black and

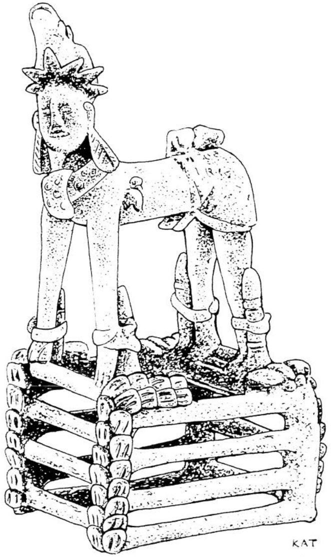


12.3 Scaffold Vase. (Photograph courtesy of Dumbarton Oaks Research Library and Collections, Washington, D.C. Roll-out drawing by Diane Griffiths Peck.)

wearing a jaguar-skin skirt, tail, and leggings. This scene resembles the protohistoric *Pacum Chac* rites of *Pax*—the *holcan okot* dance as well as the *Tup Kaak* rite.[4] The Classic *Tup Kaak* and scaffold sacrifice appear to have been closely related; in fact, they might at times have been simply separate phases of the same rite.

The month of *Pax* contains many allusions to warfare and human sacrifice. By the Goodman-Martínez-Thompson correlation, *Pax* occurred in midwinter during the Late Classic (Morley 1956:table X). This would be the ideal time to engage in warfare and raids in order to secure prisoners, for it would be after the harvest and before the planting. Roys (1972:67) notes that the protohistoric Yucatec fought primarily during this fallow winter season. During their raids and battles, the Yucatec Maya removed the jaws of slain enemy warriors (Landa 1941:123). This may have been a Classic-period custom as well, since the diagnostic feature of the Classic patron of the month *Pax* is the lower jaw having been torn from his face (see figs. 12.6a, c, and 12.7c).

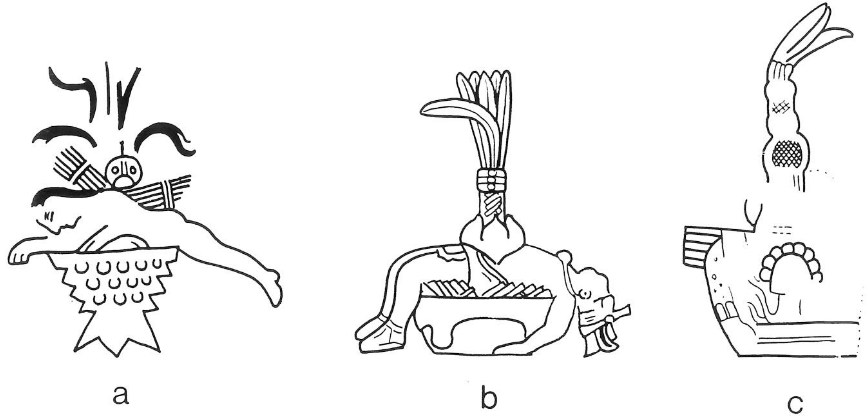
M. D. Coe (1973:77) has mentioned the close relationship between music and violence in Classic vase scenes, an association underlined in M. E. Miller's (1981, 1986)



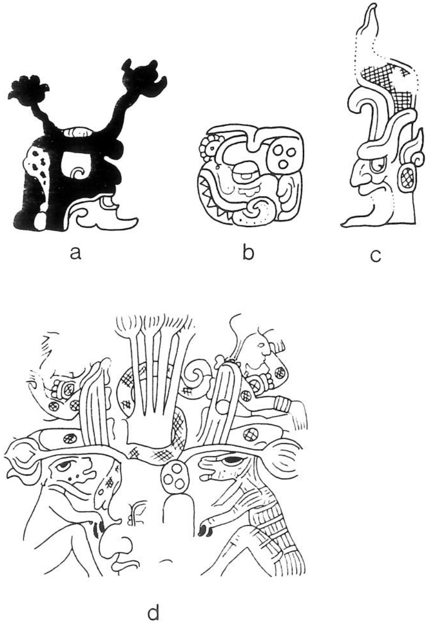
12.4 Figurine from Jaina, Campeche. (Private collection. Drawing by the author after photograph courtesy of Marilyn Goldstein.)

---

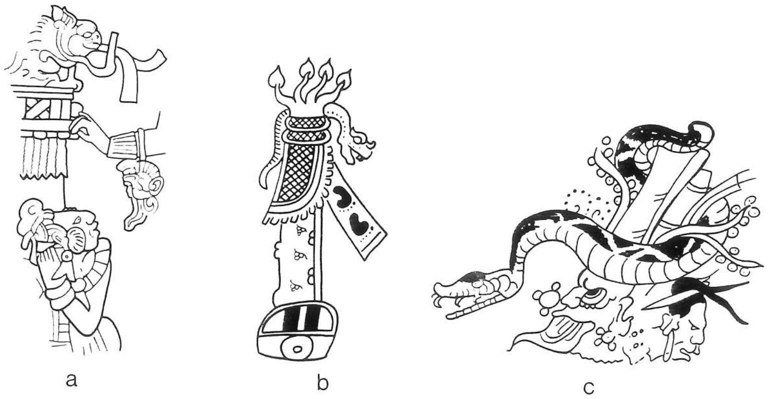
[4] The Tohcok doorjamb probably represents a *Tup Kaak* ceremony concerned with the ending of the *katun*. In the center of the burning bundles, there is the day sign *Ahau*, the day on which the *uinal, tun, katun*, and the larger Long Count periods end.



12.5 Possible Classic-period variant of the Yucatec *Tup Kaak* ceremony. a. Detail of painted doorjamb, Tohcok, Campeche. (Redrawn by the author after Proskouriakoff 1965:fig. 13b.a.) b. Detail of Piedras Negras Stela 11. (Redrawn by the author after Maler 1901:pl. XX,1.) c. Detail of Piedras Negras Stela 14. (Redrawn by the author after ibid.:pl. XX,2.)



12.6 Pax God trees and Uinal Toad Pax, Late Classic. a. Pax God tree trunk. (Redrawn by the author after M. D. Coe 1978:no. 8.) b. Uinal Toad on Tikal Stela 20. (Redrawn by the author after W. R. Coe 1965b:32.) c. Pax God tree trunk. (Redrawn by the author after M. D. Coe 1975:no. 6.) d. Detail of figure 12.8. (Redrawn by the author after Mason 1943:pl. LV.)



12.7 The Postclassic *acante* and related Classic forms. a. Detail of Chinkultic Monument 18. (Redrawn by the author after Navarrete 1984:fig. 60.) b. *Acante* (Dresden Codex, p. 26). (Drawing by the author.) c. Pax God tree as *acante*. (Redrawn by the author after Robicsek and Hales 1981: vase 36.)

discussion of warfare and sacrifice in the Bonampak murals. Citing ethnohistoric data from a number of regions in Mesoamerica, Bricker (1981b:147–149) notes the identification of the *tun* or *teponaztli* drum with rain, warfare, and scaffold sacrifice. Floyd Lounsbury has mentioned (personal communication, 1981) that the Tzotzil Chamula month equivalent to the Yucatec *Pax* is *hʔok'en 'ahwal*, with *'ok* signifying weeping, crying, or the sound of a musical instrument (see Laughlin 1975:67). The pervasive association of music with violence suggests that, in terms of the Chamula month name, *ʔok'* may have alluded to both the sound of the instrument and the cries of the victim.

The Highland Maya *Annals of the Cakchiquels* states that the tree sacrifice of Tolgom was symbolically enacted in the month of *Uchum* (Recinos and Goetz 1953:75). Thompson (1971:106) notes that *Uchum* was the Cakchiquel equivalent of the Yucatec *Pax*. Tree trunks composed of Pax God heads in profile are fairly common on Classic Maya vessels (fig. 12.6). It is probable that the Pax God head qualifies the tree as a tree of sacrifice. One Classic *Pax* tree appears to be an antecedent of the Yucatec *acante* found in the New Year pages of the Dresden Codex (fig. 12.7b, c). As in the Dresden examples, the Classic tree has a paper banner as well as an encircling serpent. The primary difference is that a gory Pax God head replaces the Dresden *tun*-sign base (T548). However, the conventional *Pax* month glyph (T549) is composed of the *tun* sign topped with a bifurcated element. In the *Ritual of the Bacabs,* there is an association between an *acantun,* an *acante,* and an "arbor," a bound wooden structure of some sort.

> Four are the doors to his arbor; four are those to his *acantun,* where his birth occurred. Four splotches of blood, four splotches of clotted blood [are] behind the *acantun,* the *acante*. . . . Four were their flint lancets; four were their male genitals; four were their arbors, when his birth occurred. (Roys 1965:12)

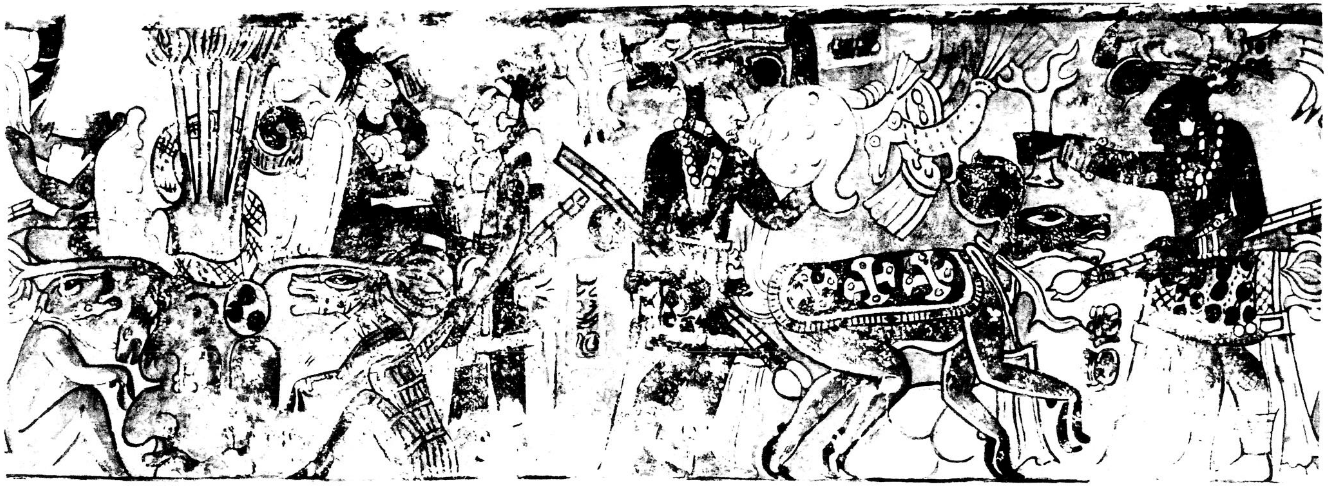
It is quite possible that the arbor, or *dzulbal,* is the scaffold, the tied wooden frame upon which captives were executed. The meanings of and actual distinctions between the *acantun,* the *acante,* and the *dzulbal* remain uncertain, however. The Yucatec term *acan* generally has been translated as 'to set up' (e.g., Thompson 1972:91). *Acan,* however, can also mean 'to roar, bellow, groan, or howl' as well as 'to thunder' (Tozzer 1907:4; Barrera Vásquez 1980:5). These latter meanings are in excellent accord with the musical and sacrificial significance of both the *Pax* month and the scaffold rite. The scaffold victim's screams and the accompanying music seem to have served as an imitation of thunder, the presage of rain.

M. E. Miller (1981, 1986) has suggested that the large sloping elements occurring on the Scaffold Vase are trumpets. The figure sitting at the base of the scaffold holds another trumpet and faces the musicians, as if to lead them on. M. D. Coe (1975:26) has noted the similarity of this figure to the Jaguar God of the Underworld (GIII), who tends to have the same profile and whiskers and a similar ear. The ear in this case is a round disk that probably refers to another jaguar-related deity, the Pax God. The Classic Pax God tends to have the round ear of the Uinal Toad (fig. 12.6b), as well as a Roman nose and jaguar attributes. Moreover, the context of music and sacrifice is in accord with the symbolism noted for the month *Pax*. The only feature of the figure that argues against a Pax God identification is the presence of a jaw; the jaw is shown here probably because the vase represents the actual rite and not its idealized symbolic meaning. The seated figure is a Pax God impersonator; to represent him living but with no lower jaw would contradict the realistic context of the scene.

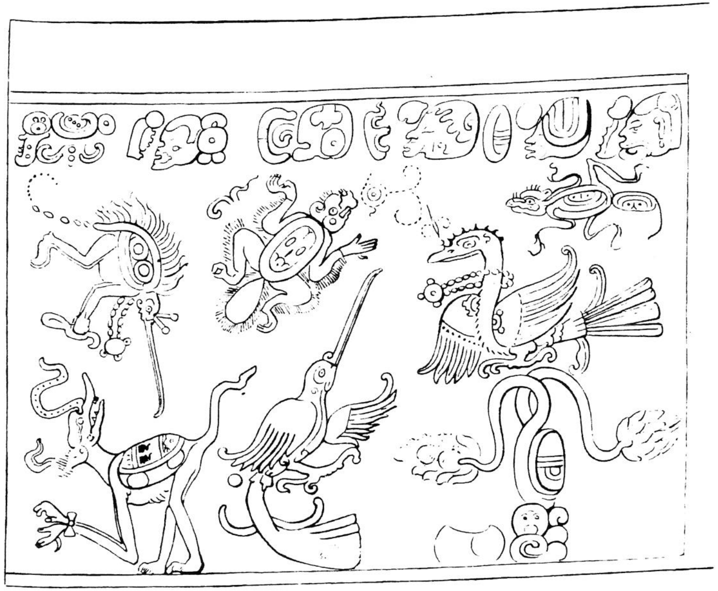
A number of Classic vases may depict idealized symbolic counterparts of the scaffold ritual. The Calcehtok Vase appears to be an enactment of the capture and sacrifice of the victim in the metaphoric context of the hunt (fig. 12.8). A series of traits is shared by the Scaffold and Calcehtok vases, which are both at Dumbarton Oaks. Clearly, the Pax God tree of the Calcehtok Vase is the mythical analogue of the scaffold and of the Pax God impersonator of the ritual scene. The axe-wielding individual becomes a vulture on the Calcehtok Vase. The red-painted deer-man becomes the humanized red stag, and the warriors become hunters. In exchange for the elaborate lances and cumbersome trumpets present the ritual context, the hunters hold rustic spears and conch trumpets, basic articles of the hunt. Since the Calcehtok Vase also shows the moment of capture, the thematic meanings of the two vessels are not entirely parallel. The capture is represented by the anthropomorphized red stag and the flanking hunters. The deer has the tattered ear that is seen in Classic depictions of prisoners, and his antler is grasped much as a warrior's hair is pulled in Classic scenes of capture. Here, however, the antler is entirely pulled off, suggesting the moment of execution as well as of capture.

Another polychrome vase that appears to represent the scaffold sacrifice as an event of the field is the Yalloch, or Río Hondo, Vase (fig. 12.9). Here, the scene is even further removed from the human world, for the spear-wielding warriors become a long-beaked hummingbird and stinging insects. As on the Calcehtok Vase, the vulture protagonist has a prominent position, in this case perching upon a tree. The only creature possessing human physical attributes is the miserable-looking deer, who has human limbs and bound hands, much like those of the victim in the actual ritual on the Scaffold Vase.

The pervasive Classic association of the scaffold rain ritual with the hunt seems to have continued in Yucatan into the present century, in the *ch'a-chaac* ceremony, recorded in Chan Kom in 1930 (Redfield and Villa Rojas 1934:138–143). In this case, the rite occurred in midsummer, at a time of extreme drought. The ceremony began with a hunt for deer, much like the *Tup Kaak* rite of *Mac*. During the explicit prayer for rain, four boys performing as frogs were tied to the altar, a bound wooden structure. An impersonator of the chief Chac was carried to a cleared space called the *chun-ca'an*, meaning 'trunk of heaven.' Here, while the boys imitated the chirping of frogs, the



12.8 The Calcehtok Vase. (Photograph courtesy of Dumbarton Oaks, Washington, D.C. Roll-out drawing by Mary Louise Baker, in Mason 1943:pl. LV.)



12.9 The Yalloch, or Río Hondo, Vase. (Roll-out drawing. After Gordon and Mason 1928:pl. XLVII.)

Chac impersonator occasionally rose and emitted a sound imitating the rumbling of thunder. Along with the scaffold form of the altar and the bound individuals, the Chan Kom *ch'a-chaac* ceremony seems to have retained much of the Pre-Hispanic symbolism associated with the Classic Pax God. The frogs and growling sound recall the jaguar and toad attributes of the deity; moreover, the Chac impersonator is placed in the space termed the "trunk of heaven," thus, in effect, becoming both the tree and the god.

As in regions of Central Mexico, the Classic Maya scaffold sacrifice was clearly linked with agricultural fertility. While it is uncertain whether the protohistoric Yucatec performed a human version of the *Tup Kaak* hunting sacrifice, there is evidence for such a ceremony in the Classic period. The juxtaposition of the hunt and the offering of prey with the capture and sacrifice of men seems to have been a pervasive feature of the Classic scaffold sacrifice. Through metaphoric substitution, the sacrifice on the polychrome vessels was at times depicted as a hunt, with the scaffold taking on its probable symbolic meaning of a tree.

Although the scaffold rite has clear affinities to the sacrificial symbolism of *Pax*, it should not be assumed that the Classic ceremony was performed during this month. The Classic *Pax acante* suggests that the scaffold sacrifice might have been held near or during the *Uayeb* period. In the Late Classic, the *Uayeb* New Year rites took place in late winter or early spring (Morley 1956: table X). Some forty days after the end of *Pax*, this season is closer to the vernal theme of the scaffold rite. Landa (1941:165–166) states that the protohistoric rites in preparation for *Uayeb* and the New Year began in *Pax*. It is possible that the month of *Pax* was the time for acquiring captives for the New Year ceremonies. The possibility of a New Year scaffold rite is offered as an alternative to a sacrifice taking place in *Pax*. The calendric position of the Classic scaffold sacrifice can be determined only after considerably more study of the vague-year ritual calendar.

THE SACRIFICE OF ACCESSION

Over much of ancient Mesoamerica, the sacrificial scaffold was a well-known structure of terror and power, a vital axis between death and the life-giving processes of nature. For both the Mixtec and the Maya, the scaffold ceremony heralded the planting and coming of the rains, events of crucial importance for agricultural peoples. Because of its dramatic and pervasive connection to these basic processes, it is not surprising that, in a number of ancient Mesoamerican cultures, the scaffold sacrifice constituted an important element of accession ceremonies.

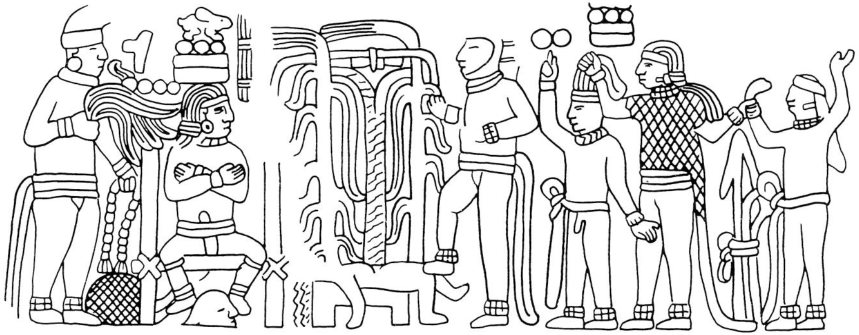
Recent studies of the Postclassic Mixtec suggest that the accession of lords commonly involved the scaffold sacrifice of a captive (Nancy Troike, John Pohl, personal communications, 1979). It appears that this may have been the case at El Tajin as well. One of the carved pillars from the Mound of the Building Columns contains a register depicting a scene of conquest and sacrifice (fig. 12.10). The main protagonist is a character identified glyphically as 13 Rabbit. In one scene, he is seated next to a captive who has growing maize flanking his hanging bowels. It is thus clear that, like the Maya deer-man and the Mixtec Xipe, the victim is symbolically identified with the earth. The place of execution appears to be to the viewer's left. This is the scaffold, but with 13 Rabbit seated within it; the victim's head lies between the legs of 13 Rabbit. A man stands next to the seminude 13 Rabbit and offers him a feathered object and a string of beads. It is probable that these are vestments of authority, and that the scene represents the moment of ritual accession to office.

The *Annals of the Cakchiquels* contains an episode in which the accession of Zacitzunun and Gagavitz is explicitly associated with the tree sacrifice of Tolgom. During the preparation of the sacrifice, the pair are proclaimed lords by their fellow warriors (Recinos and Goetz 1953:73–74). Among the protohistoric Yucatec, the sacrificial scaffold appears to have been identified with birth, blood, and dynastic descent. The *Chilam Balam of Chumayel* (Roys 1967:63–64) associates the bound wooden *dzulbal* structure with the mythic founders of lineages. In the previously cited passage from the *Ritual of the Bacabs* (Roys 1965:12), the *acantun, acante,* and *dzulbal* are mentioned in connection with birth and bloodletting.[5]

In a landmark study, Proskouriakoff (1960) established that the four "niche stelae" at Piedras Negras were accession monuments carved to denote the ruler's rise to power. I have suggested that the niche stelae contain representations of scaffolds, namely that the ladders at the lower center of the monuments were symbolic of the

---

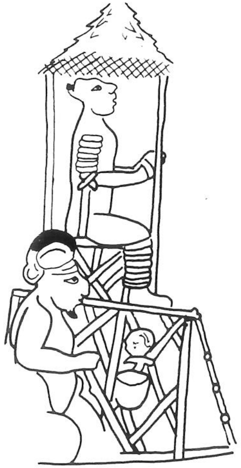
[5] Van Gennep (1960) notes that ceremonies involving change of status tend to have three distinct stages: first, a period corresponding to the death or negation of the subject; next, a transitional liminal state; and, finally, a rebirth of the subject into the new status. The wooden scaffold may have been regarded as a sort of lineage tree from which the acceding lord was reborn.



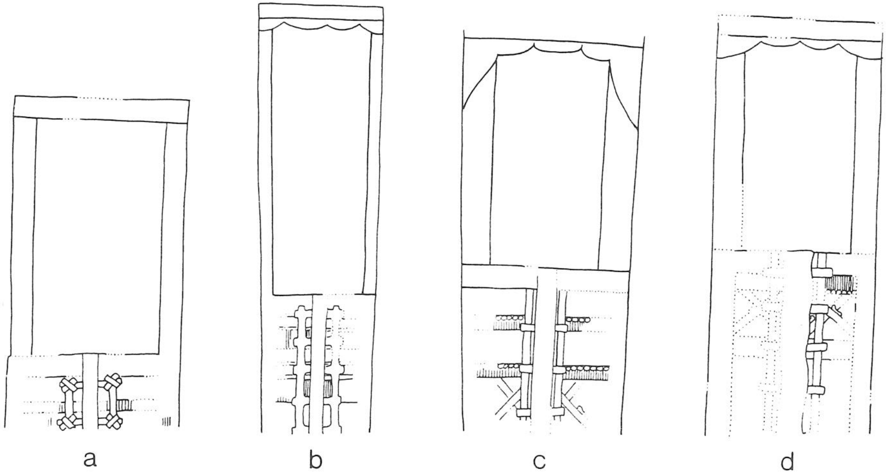
12.10 Detail of bas-relief column from El Tajin, Veracruz. (Redrawn by the author from Wilkerson 1980:220–221.)

scaffold (Taube 1979, 1980). It now seems that only the ladder on the earliest stela, Stela 25, serves as a symbol of the scaffold (fig. 12.15c). It appears to be an abstracted form of the scaffold; for the present study, it will be termed the "scaffold motif." However, while the other niche stelae examples are simply ladders, they serve as ladders for realistically depicted scaffolds. The entire niche stela format represents a complex platform scaffold. The structure can be seen on a Late Classic polychrome vase published by Paul (1976). In this scene of scaffold sacrifice, the victim sits bound to a tall wooden frame (fig. 12.11). The scaffold and the victim are represented in profile; if they were viewed face on, one would see the format of the niche stelae, but with a miserable captive rather than a great acceding lord. If the actual structures of the four niche stelae are isolated from the welter of iconographic motifs (fig. 12.12), it is readily apparent that they are the same as that shown on the polychrome vase. The diagonal crossbeams at the base of the vase scaffold are visible in certain areas of the background on Stelae 11 (fig. 12.13) and 14 (fig. 12.12d). Like all the niche stelae, the vase scaffold has a wooden ladder, which can be seen as a diagonal line with four dots, the line being the side of the ladder and the four dots the rungs.

On all the Piedras Negras accession stelae, the acceding lord wears a jawless-animal headdress. The saurian triangular teeth and beaklike snout tip make it readily apparent that this is not a jaguar but, rather, its amphibian counterpart, the toad. The



12.11 Detail of Classic Maya vase. (Art Institute of Chicago. Redrawn by the author after Paul 1976:120.)



12.12 Schematic outline of scaffold structures on Piedras Negras niche stelae. a. Stela 25, 9.8.15.0.0. (Redrawn by the author after Maler 1901:pl. XXII.) b. Stela 6, 9.12.15.0.0. (Redrawn by the author after ibid.:pl. XV.) c. Stela 11, 9.15.0.0.0. (Redrawn by the author after ibid.:pl. XX,1.) d. Stela 14, 9.16.10.0.0. (Redrawn by the author after ibid.:pl. XX,2.)

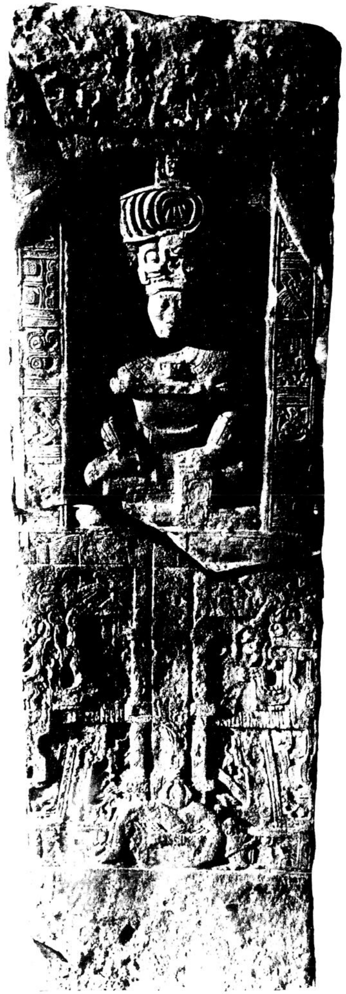
head is essentially that of the "upended frog" glyph that indicates "birth" (T740). Whether the entity in this case refers more directly to birth or to *Pax* and water symbolism remains to be seen.

The Piedras Negras accession stelae are virtually dripping with imagery of agricultural renewal associated with the scaffold sacrifice. On all the niche stelae, a bird descends from above the seated lord. This creature is not the Moan Owl but a symbolic representation of the vulture, an archaistic form that can be traced back to the Late Preclassic (Taube 1980). The head is the so-called "long-lipped" variant of the personified *tun* glyph (T1031). The Moan beak is short and sharply pointed; the Tun Vulture beak is long, down-curving, and blunt-tipped. In profile, the vulture head is essentially that of the "Ave de Pico Ancho" of Zapotec iconography, identified as a King Vulture by Caso and Bernal (1952). The presence of the vulture on the niche stelae is directly related to the scaffold theme of the monuments, for, as noted here, the vulture appears to have had an important symbolic role within the Classic scaffold renewal ceremony.

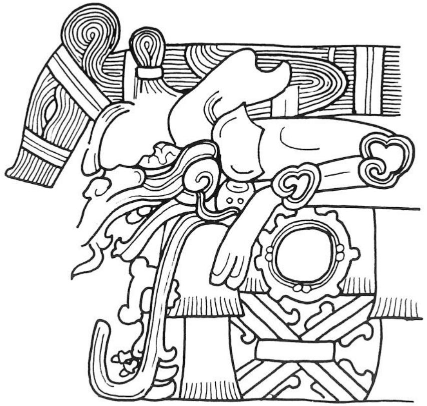
One probable year-renewal element not previously mentioned is the curious vegetal bundle lying just below the seated ruler on all of the Piedras Negras accession stelae (figs. 12.13, 12.14, 12.15). On Stelae 25 and 33, it is clearly a deer effigy with a large, pulled-out knot to represent the ear. The same bound straw deer occurs on the Calcehtok Vase as one of the deer flanking the Pax God tree (fig. 12.6d). Although the deer effigy appears to be a feature of renewal rites, its ceremonial role remains obscure.

On Piedras Negras Stelae 11 and 14, victims appear at the base of the scaffold (fig. 12.5b, c). As with the Tohcok example of a possible *Tup Kaak* victim, the corpses are directly associated with wood bundles. Thus, the Piedras Negras examples may also represent a form of the *Tup Kaak* in which captives, rather than game, were offered for rain. It is uncertain whether these are the victims slain in the scaffold sacrifice, but, given their presence on scaffold monuments, it is a reasonable supposition. Moreover, the Stela 11 victim has an object of paper or cloth on the small of his back. Similar garments are worn by the victim on the Scaffold Vase and the victim on the illustrated figurine (figs. 12.3, 12.4). It appears that, at Piedras Negras, the scaffold sacrifice and a variant of the *Tup Kaak* were parts of a single renewal ceremony.

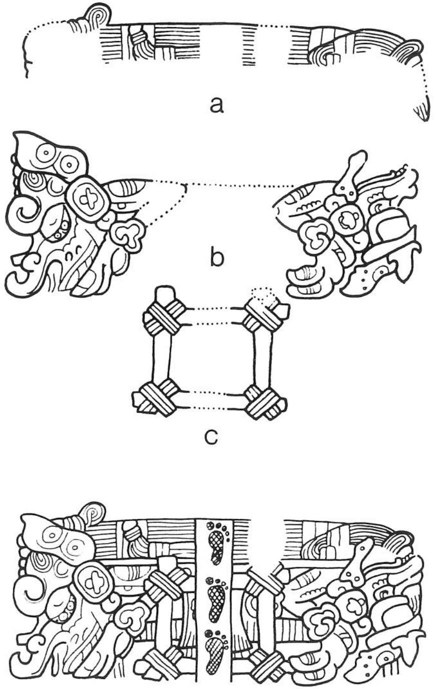
The sacrificial theme of the hunt is suggested also by the bicephalic deer-legged creature found draped over the mid-portion of the accession-stelae scaffolds (figs. 12.13, 12.14). Whereas the inverted head to the viewer's right on Stela 11 is that of a skeletal god wearing the Quadripartite Badge, that to the left appears to be a serpent-deer. The head has a serpent's long, curving teeth and upper lip, and a large and prominent deer ear. In place of an ear spool, it most commonly wears a Spiny Oyster shell (*Spondylus princeps*). The occasionally bearded jaw recalls the Bearded Dragon, a being, usually serpentine, that often has antlers and deer ears (see M. D. Coe 1978:no. 3). Although the creature is perhaps related to the Bearded Dragon, its specific deer attributes warrant giving it a separate name. In view of the serpent and deer forms, it



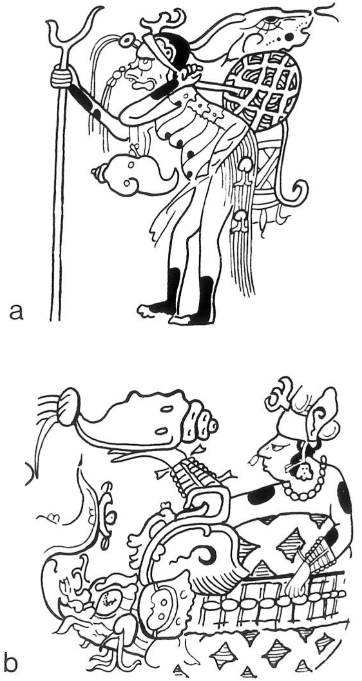
12.13 Piedras Negras Stela 11. (Photograph by Teobert Maler, courtesy of the Peabody Museum, Harvard University.)



12.14 Detail of Piedras Negras Stela 33. (Redrawn by the author after Maler 1901:pl. XXVI, 2; Greene, Rands, and Graham 1972:pl. 21.)



12.15 Iconography found at the base of the Piedras Negras Stela 25 scaffold. (Redrawn by the author after Maler 1901:pl. XXII.)



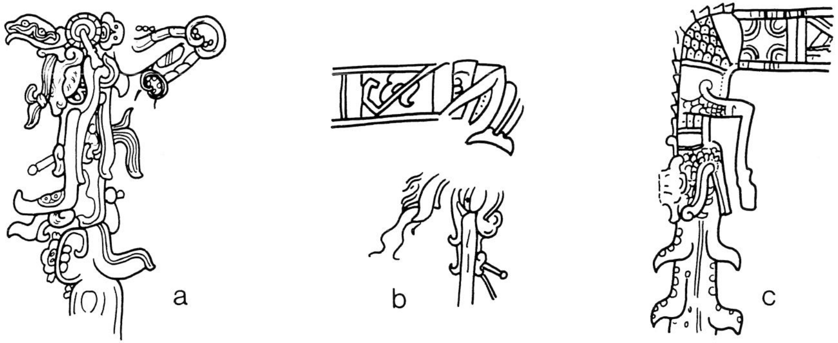
12.16 Iconography of the hunt on Late Classic polychrome vases. a. God A with staff, conch, and bundle. (Redrawn by the author after Robicsek 1978:fig. 37.) b. Young lord with conch and bundle. (Private collection. Drawing by the author.)

may be an antecedent of the contemporary Chorti mythic horned serpent, the Chicchan, or *txih txan*, which brings both earthquakes and rain (Wisdom 1940:392–397; Fought 1972). Until such an identification is demonstrated adequately, the creature should perhaps be referred to by the noncommittal label "Serpent-deer" (fig. 12.17).

The Serpent-deer commonly occurs with a slack mouth and half-open eye, strongly suggesting a freshly slain animal. Moreover, some sort of liquid can be seen pouring from it and from the inverted skeletal heads of the Piedras Negras bicephalic creatures. It is probable that this liquid represents both blood and water. As noted by Saville (1929:173), the falling blood of the scaffold victim was symbolic of rain. The association of the Serpent-deer with both sacrifice and the hunt is suggested by one variant of the left bicephalic head. On a polychrome vase of unknown provenance, the head is affixed to a cushion throne (fig. 12.16b). The "stacked–bow tie" motif across the cushion supports the allusion to blood sacrifice, since this knotted element is a basic feature of the Classic Maya bloodletter (Joralemon 1974). The cushion itself also refers to bloody sacrifice. It is composed of a straw bundle surrounded by a net, possibly of cut skin. A similar bundle is often carried by individuals performing the role of hunters. On one polychrome vase, a horned God A carries the bundle with a severed deer head on top (fig. 12.16a); this deer head probably alludes to the contents, and it is likely that the netted straw bundles contain the dismembered parts of animals slain and butchered in the field. The symbolism of the *xoc*-fish cushion correlates well with that of the Piedras Negras scaffold; both appear to be bloody thrones of sacrifice intimately associated with the hunt.

Rands (1955:303) noted that the left head of the Piedras Negras bicephalic monster (i.e., the Serpent-deer) occurs also on page 74 of the Dresden Codex (fig. 12.17c). As in a good number of Classic examples, the creature's body forms a skyband. Furthermore, blue water spews out of the animal's mouth, recalling the streams seen issuing out of the accession-stelae examples. Thompson (1972:89) suggested that page 74 represents the coming of the rains as well as the flood. It is noteworthy that page 74 immediately precedes the four New Year pages of the *acante*. Considering that the Dresden appears to be derived from a Classic codex (ibid.:15), it would be appropriate to associate the beginning of the rains with the New Year, since this would have been the Classic-period New Year season.

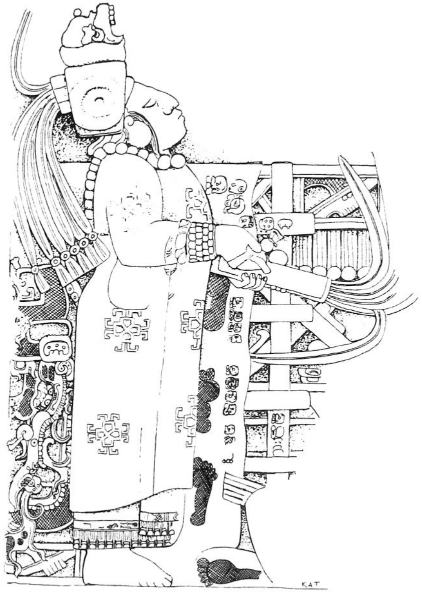
On all four Piedras Negras niche stelae, the scaffold ladder is covered with a strip of bark paper or cloth patterned with crosshatched human feet, strongly suggesting the path of an individual (figs. 12.12, 12.15). It would be tempting to interpret the cloth as representing the lord's upward path of accession, save that on Stela 11, where the prints point down. Markedly similar footprinted cloths occur on the *acante* of the



12.17 Examples of the Serpent-deer in Late Classic and Postclassic Maya art. a. Palenque, House E doorway. (Redrawn by the author after Maudslay 1889–1902, vol. 4:pl. 43.) b. Skyband Serpent-deer on Late Classic polychrome vase. (Redrawn by the author after Robicsek 1978:pl. 174.) c. Postclassic form of Serpent-deer (Dresden Codex, p. 74). (Drawing by the author.)

Dresden New Year pages (fig. 12.7b).[6] On the Dresden *acante*, however, the prints all point down.

It seems likely that both the Dresden Serpent-deer and the *acante* strips are closely related to the bicephalic creature and the scaffold cloth found on the Piedras Negras niche stelae. At Piedras Negras, the sacrificial scaffold was possibly regarded as the *acante* of the lord, his place of personal bloodletting. On Stela 14, the acceding lord sits within the scaffold while a heavy woman stands below with a feathered object in her hands (fig. 12.18). She appears to be unwrapping it from its enclosing cover, so that within the separating sheath one can see a multi-banded edge. What she holds is the feathered bloodletter identified by Joralemon (1974); the edge is the side of the knotted-cloth handle. Thus, the ruler appears to have seated himself within the victim's scaffold to do his own form of blood sacrifice—a voluntary, self-inflicted act rather than actual torture and execution.



12.18 Detail of Piedras Negras Stela 14. (Drawn by the author at The University Museum, University of Pennsylvania.)

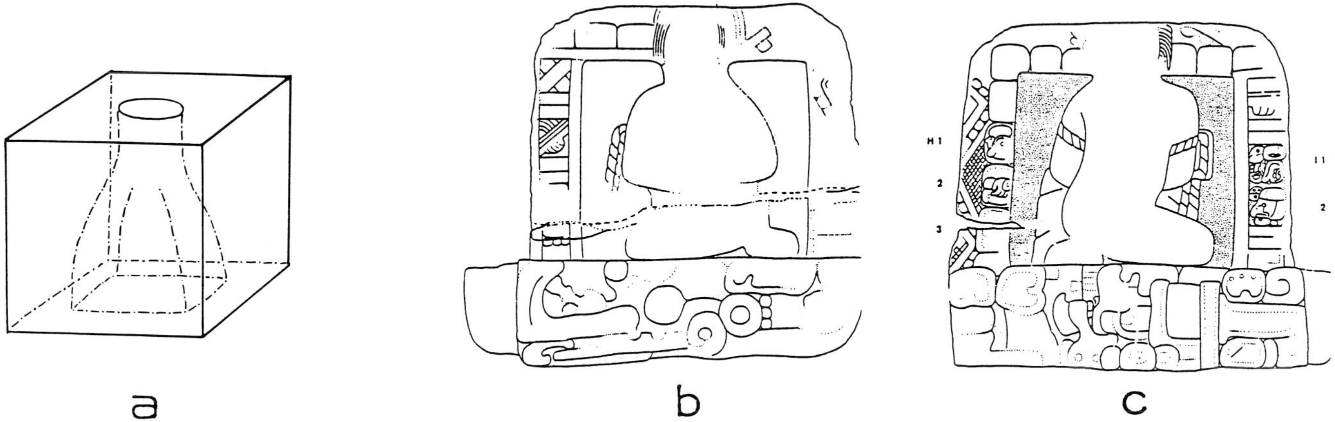
The scaffold iconography on the Piedras Negras niche stelae was not intended simply to depict an agricultural ritual. It is clear that the sacrificial theme of spring renewal was largely meant to dramatize the state ceremony of accession. Using the Goodman-Martínez-Thompson correlation, the accession dates recorded at Piedras Negras do not all fall in the spring, or in any other one season. Factors other than agricultural seasons were involved in the timing of accession ceremonies at Piedras Negras.

A curious monument from Tonina contains much of the iconography found on the niche stelae at Piedras Negras. Called Tonina Monument 8 (T–8) by Blom and La Farge (1927, vol. 2:277), the sculpture is roughly cubic with a niche on each of the four vertical sides (fig. 12.19). The sides of the niches are carved with skybands, as at Piedras Negras, and with a serpent body with prominent Chicchan markings. Instead of lords, however, bound prisoners occupy three of the niches (the fourth has a glyphic text). The most marked iconographic similarity to the Piedras Negras accession stelae is the presence of the skeletonized god and Serpent-deer heads on opposite sides of the monument (fig. 12.19 b, c). Like the Piedras Negras bicephalic examples, the skeletal god head with the Quadripartite Badge faces in a different direction from the Serpent-deer.

The most striking feature of T–8 is that it has been completely bored from top to bottom. Several monuments from the Tonina region share this characteristic. It is clear that most of these served as foundations for stelae having plugs on their bases, but this does not appear to have been the case for T–8. It is a good deal taller than most of the foundation stones, in the form of a cube rather than a slab. Most telling is the form of

---

[6] I am grateful to Dr. James Fox of Stanford University for his fruitful comments concerning the *acante* of the Dresden Codex. Dr. Fox pointed out that certain of the scaffold imagery I was concerned with—the tree and the serpent—also occurs on the Dresden *acante*.



12.19 Tonina Monument 8, Late Classic. a. Schematic isometric view, showing interior bore. (Drawn by the author from data provided by Blom and La Farge 1927, vol. 2:277.) b. Side 2, with prisoner in skyband-and-serpent niche. (Redrawn by the author after Mathews 1983:fig. 29.) c. Side 4, with prisoner and skeletonized god with Quadripartite badge. (Redrawn by the author after ibid.:fig. 31.)

the bore. Instead of being a straight-sided cut, the bore flares out as it proceeds down through the monument and, in widening, becomes increasingly four-sided (fig. 12.19a). At the top, one sees a round opening less than one foot across, whereas the bore at the basal edge is square and roughly twice the size of that at the top. The inwardly flaring bore would make little sense for a stone plug placed from the top. Such a bore is ideally suited, however, for holding a post inserted from the basal side. Carved to fit the four-sided tapered bore, such a post would be virtually immobile, since the square base and constricted neck would make it impossible for it to be twisted or pulled out. This post might have served as the immobile beam to which prisoners were tied and executed. Considering the graphic portrayal of captives, the skyband-and-serpent niche, and the bicephalic creature found on T–8, it appears that it served as the base for the Tonina sacrificial structure—a single post rather than the complex scaffold found at Piedras Negras.

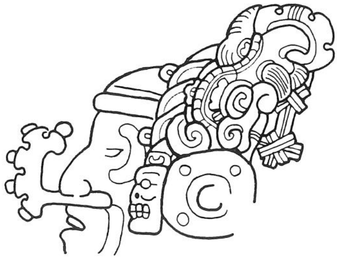
If the hollowed core of T–8 was to receive a beam of wood, this could only have been for a freestanding post. A previously well-planted post would create logistic problems for the raising and setting of T–8 around it and would make any stabilizing function of T–8 superfluous. It is likely that monument and post were intended to stand free upon the ground. According to Blom and La Farge (1927, vol. 2:277), T–8 is some 80cm high and 75cm on each side—fairly large, but movable by a determined individual.

A curious feature of Mesoamerican scaffold ceremonies is that the rite was at times associated with rumbling and shaking of the earth. In the Aztec *Ochpaniztli* sacrifice to Toci, a symbolic enactment of the scaffold sacrifice, the place of execution was believed to shake (Durán 1971:235). A similar belief was associated with the Cakchiquel sacrifice of Tolgom, in which the place of the tree sacrifice, Cakbatzulu, was thought to tremble and shake (Recinos and Goetz 1953:73). The Chorti Chicchan, a possible contemporary version of the Serpent-deer carved on T–8, is also believed to cause earthquakes as well as rain. Monument T–8 might have served as a ''thundermaker,'' a device for achieving a rumbling effect. The beam to which the prisoner was tied could—with his excited attempts to escape from the pole—have acted as a lever, causing the stone to rock. If the monument had been located on a plastered courtyard, it could have created vibrations felt and heard by all. By building a true-to-scale model of the suggested structure, one would be able relatively simply to discount or support this possibility.

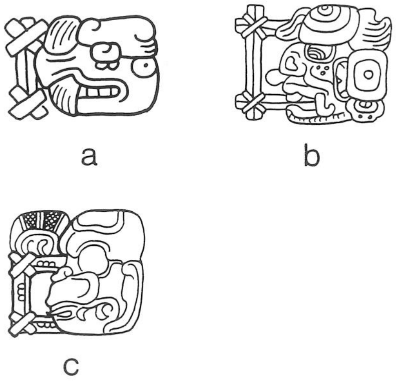
At the highland site of Chinkultic, not far from Tonina, a number of stelae depict the presentation of a captive against a standing post, like the one that may have been fitted into T–8. The Chinkultic examples found on Monuments 1, 7, 17, 18, and 20 (Navarrete 1984:figs. 9, 24–29, 50–62, 64) are clearly Classic forms of the Dresden *acante*. The upper section of each of the better-preserved examples is marked by a horizontal skyband (fig. 12.7a). In contemporary Mayan languages, the terms for 'sky' and 'serpent' are frequently near or complete homophones; in view of the many substitutions between serpent and sky signs in Classic script, this was clearly the case also among the Classic Maya (see Houston 1984). Skybands and a serpent body constitute the sides of Tonina Monument 8, and it is probable that the skyband on the Chinkultic beam is equivalent to the serpent wrapped around the upper portion of the Dresden *acante*. Both would produce the phonetic value of *chan* in Cholan, and they would be near homophones ('sky,' *caʔan,* and 'serpent,' *can*) in Yucatec.

In the Chinkultic scenes, the standing lord appears to be dropping something upon the captive. I suspect that it is the ruler's own blood. As at Piedras Negras, the lord identified himself with the victim through personal bloodletting. At Chinkultic, the lord's blood may have actually mingled with that of the victim during the ensuing execution against the post.

The scaffold motif occurs at Tikal during both the Early and Late Classic periods. It is present in the headdress of ''Stormy Sky,'' the main protagonist on the Early Classic Stela 31 (fig. 12.20). The glyphic form of the scaffold motif, T193, can be found prefixed to main signs of Early and Late Classic Tikal texts, the compound apparently serving as a title (fig. 12.21).



12.20 Detail of Tikal Stela 31. (Redrawn by the author after W. R. Coe 1965b:33.)



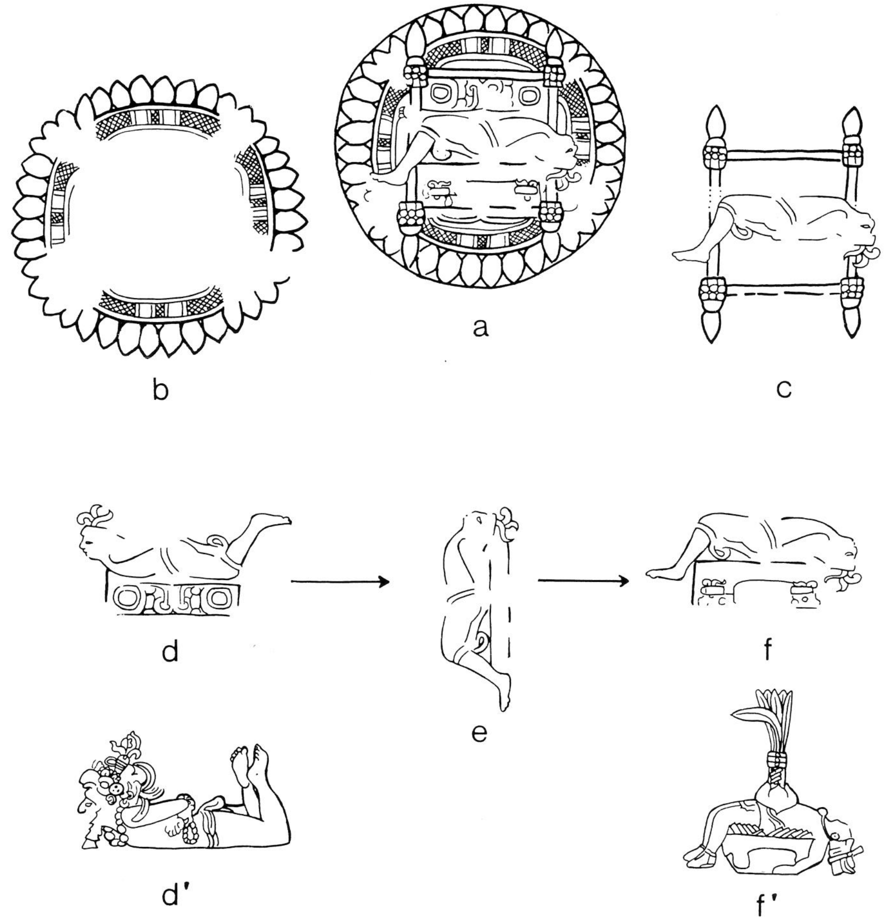
a

b

c

12.21 Tikal examples of T193. a. From Early Classic carved vessel. (Redrawn by the author after W. R. Coe 1965b:30.) b. From Stela 6, Early Classic. (Redrawn by the author after W. R. Coe 1967:45.) c. From Stela 5, Early Classic. (Redrawn by the author after Jones 1977:fig. 14.)

The upper surface of Tikal Altar 10 is a detailed representation of the scaffold motif as a symbol of human sacrifice (fig. 12.22). Five principal elements compose the Late Classic design: the victim, the scaffold, a petaled disk, and two decorated platforms. The disk encircles the other four elements; its black ring and petaled edge are markedly similar to the Postclassic Central Mexican *atlatl* example (fig. 12.1b). The sacrificial



12.22 Iconographic analysis of Tikal Altar 10, Late Classic. a. Scene on top of Altar 10, with loss of detail from weathering. (Redrawn by the author after Clancy 1976:fig. 8.) b. Petaled disk. (Drawing by the author.) c. Victim within scaffold motif. (Redrawn by the author after Clancy 1976:fig. 5.) d. Live victim. (Drawing by the author.) d′. Live victim, Tikal Altar 8. (Redrawn by the author after Clancy 1976.) e. Victim standing against a post. f. Slain victim (see fig. 12.13). (Drawings by the author.) f′. Detail of Piedras Negras Stela 11. (Redrawn by the author after Maler 1901:pl. XX,1.)

structure is the four-sided scaffold motif, created by two double-headed spears connected with simple crossbars. The spear points probably refer to the conventional method of dispatching the victim. The two platforms form a balanced pair and flank the victim, who can be viewed as lying on his back upon one and on his stomach upon the other. Clancy (1976:14) calls attention to the unusual ambiguity of Altar 10 and compares the face-down position to that on Tikal Altar 8 (fig. 12.22d′). She also notes that the face-up supine position is that used in heart sacrifice. She suggests, however, that the scene is more complex, for the altar can be viewed in ''at least'' two ways. Considering the scaffold imagery, a third possible position is that of the victim standing against a simple post. By starting with the victim lying on his belly, then proceeding counterclockwise to the other side of the altar, one would see the presentation of the live captive, his immolation against the scaffold post, and, finally, his slain body upon the pedestal (fig. 12.22d–f). The final position of the victim is identical to that of the victims at the base of the Piedras Negras stelae scaffolds (figs. 12.22f′ and 12.5b, c, 12.13).

Scaffold sacrifice was an important ceremonial feature at a number of major Classic Maya sites. As was true of accession ceremonies of the Mixtec and, presumably, the El Tajin lords, the sacrifice seems, at times, to have dramatized the ruler's rise to power. A striking feature of the monumental representations of the lord and the scaffold is that, commonly, he is situated in direct relation to the sacrificial structure. At El Tajin and Piedras Negras, the lord sits within the scaffold, while at Chinkultic he appears to sprinkle blood upon the captive and the post. In part, the position of the lord relative to the awesome, ''earth-shaking'' structure could have been intended to demonstrate his unique link to such vital natural forces as the rains and the fertile earth. The lord's thematic placement does not seem to be a simple gesture of might, however. He appears, instead, to be identifying himself with the victim, a strange but pervasive ritual association (see Schele 1984a). Blood sacrifice appears to have been the major ritual link between the ruler and his prisoner. Just as the Maya lord pierced such sensitive parts of his body as his tongue and phallus, the body of the tortured prisoner was repeatedly pierced by spears. In terms of the state ceremonies of the Maya elite, it is as if the torture and killing of the victim served as a ritual amplification of the lord's bloodletting act.

CONCLUSIONS

Over much of Mesoamerica, a sacrificial rite seems to have involved three basic themes: the hunt, planting, and war. The victim was identified with game, with creatures that frequent trees and brush. The blood of the speared victim fertilized the scaffold tree, allowing regeneration and renewal. The victim, like the Classic Maya deer, also symbolized the earth; his spearing reenacted the spring planting, and his pouring blood symbolized the rains. The theme of war also involved aggression, but, rather than dominance over animals or the fields, it was the conquest and subjugation of men. War was the primary source of victims and the logical basis of the ceremony; it is probable that the executioners were warriors rather than hunters or farmers.

The capture and subjugation of outsiders may have had special significance for the ceremony. It is uncertain whether the victims were intended to suffer a great deal, but, given their bound, immobile state, it is probable that they did. The choice of an outsider for torture negated the personal human qualities of the victim. During the sacrifice, the screams of the victim and the din of accompanying music as an imitation of thunder perhaps evoked a sympathetic magic for bringing rain. The sacrifice seems to have had the purpose of increasing the fertility of the fields through renewal ceremonies, as well as shaming and annihilating the enemy.

The scaffold ceremony does not appear to be a full-blown innovation invented by an enterprising elite; rather, it originated long before the emergence of complex Mesoamerican states, an example of a ''little tradition'' becoming part of the ''big tradition'' of the ruling elite. At Piedras Negras, the year-renewal imagery of the fields could at times become divorced from the seasonal context to express the ruler's rise to power, but the presence of such renewal elements as the straw deer, the vulture, the *Tup Kaak* bundles, and the sacrificial scaffold all suggest that subsistence concerns for fertility and regeneration were of vital importance to the Classic Maya elite.

Bibliography

Acosta, Jorge
1977 "Excavations at Palenque, 1967–73." In Norman Hammond, ed., pp. 265–285.

Adams, Richard E. W.
1971 *The Ceramics of Altar de Sacrificios.* Papers of the Peabody Museum of Archaeology and Ethnology, Vol. 63, No. 1. Harvard University, Cambridge, Mass.
1977a "Comments on the Glyphic Texts of the 'Altar Vase.' " In Norman Hammond, ed., pp. 412–420.
1986 "Lost City of the Maya: Río Azul." *National Geographic,* Vol. 169, No. 4, pp. 420–451.

Adams, Richard E. W., Editor
1977b *Origins of Maya Civilization.* A School of American Research Book, University of New Mexico Press, Albuquerque.

Agrinier, Pierre
1960 *The Carved Human Femurs from Tomb 1, Chiapa de Corzo, Chiapas, Mexico.* Publication No. 5, Papers of the New World Archaeological Foundation No. 6. Orinda.

Alvarez, Christina
1980 *Diccionario etnolingüístico del idioma maya yucateco colonial, I: Mundo Físico.* Universidad Nacional Autónoma de México, Mexico.

Andrews, E. Wyllys, V
1981 "Dzibilchaltun." In *Supplement to the Handbook of Middle American Indians,* Vol. 1, pp. 313–341. Victoria R. Bricker, gen. ed.; Jeremy A. Sabloff, vol. ed. University of Texas Press, Austin.

Aulie, H. Wilbur, and Evelyn W. Aulie
1978 *Diccionario ch'ol-español, español-ch'ol.* Serie de Vocabularios Indígenas 'Mariano Silva y Aceves,' 7. Instituto Lingüístico de Verano, Mexico.

Balser S., Carlos
1974 *El jade de Costa Rica: un album arqueológico.* Lehmann, San Jose.

Barrera Vásquez, Alfredo
1943 "Horóscopos mayas o el prontico de los signos del tzolkin según los libros de Chilam Balam, de Kaua y de Mani." *Registro de Cultura Yucateca,* Vol. 1, No. 6, pp. 4–33.
1980 *Diccionario Maya Cordemex, Maya-Español, Español-Maya.* Ediciones Cordemex, Merida.

Barthel, Thomas
1968 "Historisches in dem klassischen Mayainschriften." *Zeitschrift für Ethnologie,* Vol. 93, Nos. 1–2, pp. 119–156.

Benson, Elizabeth P., Editor
1973 *Mesoamerican Writing Systems: A Conference at Dumbarton Oaks.* Dumbarton Oaks Research Library and Collections, Washington, D.C.
1981 *The Olmec and Their Neighbors: Essays in Memory of Matthew W. Stirling.* Michael D. Coe and David Grove, organizers. Dumbarton Oaks Research Library and Collections, Washington, D.C.

Berlin, Heinrich
1952 "Excavaciones en Kaminaljuyu: Montículo D–III–13." *Antropología e Historia de Guatemala,* Vol. 4, No. 1, pp. 3–18.
1958 "El Glifo 'Emblema' en las inscrip-

ciones mayas." *Journal de la Société des Américanistes* [Paris], n.s., Vol. 47, pp. 111–119.

1963 "The Palenque Triad." *Journal de la Société des Américanistes* [Paris], n.s., Vol. 52, pp. 91–99.

Bernal, Ignacio
1968 "The Ball Players of Dainzú." *Archaeology*, Vol. 21, No. 4, pp. 246–251.

Blair, Robert
1964 *Yucatec Maya Noun and Verb Morpho-Syntax*. Ph.D. dissertation, Indiana University. University Microfilms, Ann Arbor.

Blom, Frans
1950 *A Polychrome Maya Plate from Quintana Roo*. Middle American Archaeology and Ethnology, No. 98. Carnegie Institution of Washington, Cambridge, Mass.

Blom, Frans, and Oliver La Farge
1927 *Tribes and Temples*. 2 vols. The Tulane University of Louisiana, New Orleans.

Boletín
1975 Epoca II, No. 14. Instituto Nacional de Antropología e Historia, Mexico.

Bolz, Ingeborg
1975 *Meisterwerke Altindianischer Kunst*. Verlag Aurel Bongers, Recklinghausen.

Boos, Frank H.
1966 *The Ceramic Sculptures of Ancient Oaxaca*. A. S. Barnes & Co., Inc., New York.

Borhegyi, Stephan F. de
1951 "A Study of Three-pronged Incense Burners from Guatemala and Adjacent Areas." *Notes on Middle American Archaeology and Ethnology*, Vol. 4, No. 101, pp. 100–124. Carnegie Institution of Washington, Cambridge, Mass.

1956 "El Incensario de 'Tres Asas' de Kaminaljuyu." *Antropología e Historia de Guatemala*, Vol. 8, No. 2, pp. 3–7.

Bricker, Victoria R.
1981a "Las ceremonias del año nuevo en los monumentos clásicos mayas." Paper presented at the XVII^e Mesa Redonda de la Sociedad Mexicana de Antropología, San Cristóbal de las Casas, Mexico.

1981b *The Indian Christ, the Indian King: The Historical Substrate of Maya Myth and Ritual*. University of Texas Press, Austin.

1985 "A Morphosyntactic Interpretation of Some Accession Compounds and Other Verbs in the Mayan Hieroglyphs." In Merle Greene Robertson and Elizabeth P. Benson, eds., pp. 67–85.

1986a *A Grammar of Mayan Hieroglyphs*. Middle American Research Institute Publication 56. Tulane University, New Orleans. In press.

1986b "Noun Incorporation in the Dresden Codex." MS.

Bruce, Robert D.
1968 *Gramática del Lacandón*. Departmento de Investigaciones Antropológicas, Publicación 21. Instituto Nacional de Antropología e Historia, Mexico.

1974 *El Libro de Chan K'in*. Colección Científica, Lingüística, 12. Instituto Nacional de Antropología e Historia, Mexico.

Carlson, John B.
1982 "The Double-Headed Dragon and the Sky: A Pervasive Cosmological Symbol." In *Ethnoastronomy and Archaeoastronomy in the American Tropics*, Vol. 385, pp. 135–163. Anthony F. Aveni and Gary Urton, eds. Annals of the New York Academy of Sciences.

Carlson, John B., and Linda C. Landis
1985 "Bands, Bicephalic Dragons, and Other Beasts: The Skyband in Maya Art and Iconography." In Merle Greene Robertson and Elizabeth P. Benson, eds., pp. 115–140.

Caso, Alfonso, and Ignacio Bernal
1952 *Urnas de Oaxaca*. Instituto Nacional de Antropología e Historia, Mexico.

Cervantes, María Antonieta
1976 "La Estela de Alvarado." In *Actas del XLI Congreso Internacional de Americanistas* [Mexico, 1974], Vol. 2, pp. 309–

322. Instituto Nacional de Antropología e Historia, Mexico.

Cheek, Charles D.

1977 "Excavations at the Palangana and the Acropolis, Kaminaljuyu." In *Teotihuacan and Kaminaljuyu: A Study in Prehistoric Culture Contact*, pp. 1–204. William T. Sanders and Joseph W. Michels, eds. Pennsylvania State University Press Monograph Series on Kaminaljuyu, University Park.

Chinchilla-Aguilar, Ernesto

1951 "La Danza del Tum-Teleche o Loj-Tum." *Antropología e Historia de Guatemala*, Vol. 3, No. 2, pp. 17–20.

Clancy, Flora

1976 "Maya Pedestal Stone." *New Mexico Studies in the Fine Arts*, Vol. 1, pp. 10–19. University of New Mexico, Albuquerque.

Cliff, Maynard B.

1982 *Nucleation in the Maya Lowlands: A Case in Belize*. Ph.D. dissertation, Southern Methodist University, Dallas.

Coe, Michael D.

1956 "The Funerary Temple Among the Classic Maya." *Southwestern Journal of Anthropology*, Vol. 12, No. 4, pp. 387–394.

1966 *An Early Stone Pectoral from Southeastern Mexico*. Studies in Pre-Columbian Art & Archaeology, No. 1. Dumbarton Oaks, Washington, D.C.

1973 *The Maya Scribe and His World*. The Grolier Club, New York.

1975 *Classic Maya Pottery at Dumbarton Oaks*. Dumbarton Oaks, Washington, D.C.

1976 "Early Steps in the Evolution of Maya Writing." In H. B. Nicholson, ed., pp. 107–122.

1977 "Supernatural Patrons of Maya Scribes and Artists." In Norman Hammond, ed., pp. 327–347.

1978 *Lords of the Underworld: Masterpieces of Classic Maya Ceramics*. The Art Museum, Princeton University. Princeton University Press, Princeton.

1980 *The Maya*. Thames and Hudson, London.

1982a *Old Gods and Young Heroes: The Pearlman Collection of Maya Ceramics*. The Israel Museum, Jerusalem.

1982b "Two Early Maya Plaques." Paper presented at the conference on the Beginnings of Maya Iconography, Princeton University.

n.d. Commentary on a Polychrome Plate from the Northern Peten of Guatemala. On loan in 1975 to the Los Angeles County Museum of Art.

Coe, Michael D., and Elizabeth P. Benson

1966 *Three Maya Relief Panels at Dumbarton Oaks*. Studies in Pre-Columbian Art and Archaeology, No. 2. Washington, D.C.

Coe, Michael D., and Peter T. Furst

1977 "Ritual Enemas." *Natural History*, Vol. 86, No. 3, pp. 88–91.

Coe, William R.

1965a "Tikal, Guatemala, and Emergent Maya Civilization." *Science*, Vol. 147, No. 3664, pp. 1401–1419.

1965b "Tikal: Ten Years of Study of a Maya Ruin in the the Lowlands of Guatemala." *Expedition*, Vol. 8, No. 1.

1967 *Tikal: A Handbook of the Ancient Maya Ruins*. The University Museum of the University of Pennsylvania, Philadelphia.

Coggins, Clemency Chase

1975 *Painting and Drawing Styles at Tikal: An Historical and Iconographic Reconstruction*. Ph.D. dissertation, Harvard University. University Microfilms, Ann Arbor.

Cook de Leonard, Carmen

1967 "Sculptures and Rock Carvings at Chalcatzingo, Morelos." In *Studies in Olmec Archaeology*. Contributions of the University of California Archaeological Research Facility, No. 3, pp. 57–84. Department of Archaeology, Berkeley.

Covarrubias, Miguel

1957 *Indian Art of Mexico and Central America*. Alfred A. Knopf, New York.

Crocker, Lin V.
n.d.a "The Oeuvre of a Codex-Style Artist." MS.
n.d.b "Pre-Columbian Art." In press.

Culbert, T. Patrick, Editor
1973 *The Classic Maya Collapse.* A School of American Research Book, University of New Mexico Press, Albuquerque.

Dieseldorff, E. P.
1926 *Kunst und Religion der Mayavölker im alten und heutigen Mittelamerika,* Vol. I. Berlin.

Digby, Adrian
1964 *Maya Jades.* Trustees of the British Museum, London.

Dorsinfang-Smets, A.
1976 *Meso-Amerikaanse Kunst.* Generale Bankmaatschappij, Brussels.

Drucker, Philip
1952 *La Venta, Tabasco: A Study of Olmec Ceramics and Art.* Bureau of American Ethnology Bulletin 153. Smithsonian Institution, Washington.
1968 "The El Mesón Monument at Angel R. Cabada, Veracruz." In *Papers in Mesoamerican Archeology.* Contributions of the University of California Archaeological Research Facility, No. 5, pp. 41–57. Department of Archaeology, Berkeley.

DuBois, John W.
1978 "Mayan Sign Language: An Ethnography of Non-verbal Communication." Paper presented at the 77th annual meeting of the American Anthropological Association, Los Angeles.

Durán, Fray Diego
1971 *Book of the Gods and Rites and the Ancient Calendar.* University of Oklahoma Press, Norman.

Durbin, Marshall, and Fernando Ojeda
1978 "Basic Word-Order in Yucatec Maya." In *Papers in Mayan Linguistics.* Nora C. England, ed. Studies in Mayan Linguistics No. 2, University of Missouri Miscellaneous Publications in Anthropology No. 6, pp. 69–77. Museum of Anthropology, Columbia, Missouri.

Dütting, Dieter
1985 "On the Context-Dependent Use of Bi- and Polyvalent Graphemes in Maya Hieroglyphic Writing." In Merle Greene Robertson and Elizabeth P. Benson, eds., pp. 103–114.

Easby, Elizabeth K., and John F. Scott
1970 *Before Cortés: Sculpture of Middle America.* The Metropolitan Museum of Art, New York.

Edmonson, Munro S.
1971 *The Book of Counsel: The Popol Vuh of the Quiche Maya of Guatemala.* Middle American Research Institute Publication 35. Tulane University, New Orleans.
1982 *The Ancient Future of the Itza: The Book of Chilam Balam of Tizimin.* University of Texas Press, Austin.

Fisher, William M.
1973 *Towards the Reconstruction of Proto-Yucatec.* Unpublished Ph.D. dissertation, University of Chicago.

Flannery, Kent
1972 "The Cultural Evolution of Civilizations." *Annual Review of Ecology and Systematics,* Vol. 3, pp. 399–426.
1973 "The Origins of Agriculture." *Annual Review of Anthropology* Vol. 2, pp. 271-310.

Förstemann, Ernst W.
1886 *Erläuterungen zur Mayahandscrift der königlichen öffentlichen Bibliothek zu Dresden.* Königl. Sammlungen für Kunst und Wissenschaft, Dresden.

Fought, John G.
1972 *Chorti (Mayan) Texts.* Sarah S. Fought, ed. University of Pennsylvania Press, Philadelphia.

Fox, James A.
1978 *Proto-Mayan Accent, Morpheme-Structure Conditions, and Velar Innovations.* Unpublished Ph.D. dissertation, University of Chicago.

Fox, James A., and John D. Justeson
1977a "Classic Maya Dynastic Relations." Paper presented at the annual meeting of the Society for American Archaeology, New Orleans.

1977b "Review of *Mesoamerican Writing Systems*" (Elizabeth P. Benson, ed.). *American Anthropologist*, Vol. 79, No. 1, pp. 164–166.

1982 "Hieroglyphic Evidence for the Languages of the Classic Maya." MS.

1984 "Polyvalence in Mayan Hieroglyphic Writing." In John S. Justeson and Lyle Campbell, eds., pp. 7–34.

1986 "Classic Maya Dynastic Alliance and Succession." In *Handbook of Middle American Indians, Supplement 4: Ethnohistory*. Victoria R. Bricker and Ronald M. Spores, eds. University of Texas Press, Austin.

Freidel, David A.

1979 "Culture Areas and Interaction Spheres: Contrasting Approaches to the Emergence of Civilization in the Maya Lowlands." *American Antiquity*, Vol. 44, No. 1, pp. 36–54.

1981 "Civilization as a State of Mind: The Cultural Evolution of the Lowland Maya." In *The Transition to Statehood in the New World*, pp. 188–227. Grant D. Jones and Robert R. Kautz, eds. Cambridge University Press, Cambridge, England.

1985 "New Light on the Dark Age: A Summary of Major Themes." In *The Lowland Maya Postclassic: Questions and Answers*. Arlen Chase and Prudence Rice, eds. University of Texas Press, Austin.

Freidel, David A., Robin Robertson, and Maynard B. Cliff

1982 "The Maya City of Cerros." *Archaeology*, Vol. 35, No. 4, pp. 12–21.

Fuentes y Guzmán, Antonio de

1932 *Historia Guatemala y Recordación Florida*. 2 vols. Biblioteca "Goathemala," Guatemala.

Furst, Jill L.

1978 *Codex Vindobonensis Mexicanus I: A Commentary*. Institute for Mesoamerican Studies, Publication No. 4. State University of New York, Albany.

Gann, Thomas

1926 *Ancient Cities and Modern Tribes: Exploration and Adventure in Maya Lands*. London and New York.

Garber, James Frederick

1981 *Material Culture and Patterns of Artifact Consumption and Disposal at the Maya Site of Cerros in Northern Belize*. Ph.D. dissertation, Southern Methodist University. University Microfilms, Ann Arbor.

Gates, William R.

1936 *Arte y diccionario en lengua cholti: A Manuscript Copied from the Libro Grande of Fr. Pedro Morán of about 1625*. (In facsimile.) The Maya Society Publication 9. Baltimore.

Gennep, Arnold van

1960 *The Rites of Passage*. University of Chicago Press, Chicago.

Girard, Rafael

1966 *Los Mayas: Su Civilización; Su Historia; Sus Vinculaciones Continentales*. Libro Mex. Editores, Mexico.

Gordon, George B., and John A. Mason

1928 *Examples of Maya Pottery in the Museum and Other Collections*, Vol. II. The University Museum, University of Pennsylvania, Philadelphia.

Graham, Elizabeth

1982 *The Highlands of the Lowlands: Environment and Archaeology in the Stann Creek District, Belize*. Unpublished Ph.D. dissertation, Cambridge University.

Graham, Ian

1978 *Corpus of Maya Hieroglyphic Inscriptions, Vol. 2, Part 2: Naranjo, Chunhuitz, Xunantunich*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.

1979 *Corpus of Maya Hieroglyphic Inscriptions, Vol. 3, Part 2: Yaxchilan*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.

1982 *Corpus of Maya Hieroglyphic Inscriptions, Vol. 3, Part 3: Yaxchilan*. Peabody

Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.

1986 "Looters Rob Graves and History." *National Geographic*, Vol. 169, No. 4, pp. 452–461.

Graham, Ian, and Eric von Euw

1975 *Corpus of Maya Hieroglyphic Inscriptions, Vol. 2, Part 1: Naranjo*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.

1977 *Corpus of Maya Hieroglyphic Inscriptions, Vol. 3, Part 1: Yaxchilan*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.

Graham, John A.

1971 "Commentary on: Calendrics and Writing in Mesoamerica." In Robert F. Heizer and John A Graham, eds., pp. 133–140.

1977 "Discoveries at Abaj Takalik, Guatemala." *Archaeology*, Vol. 30, No. 3, pp. 196–197.

1979 "Maya, Olmecs, and Izapans at Abaj Takalik." In *Actes du XLII*^{e} *Congrès International des Américanistes* [Paris, 1976], Vol. 8, pp. 179–188.

Greene, Merle, Robert L. Rands, and John A. Graham

1972 *Maya Sculpture from the Southern Lowlands, the Highlands and the Pacific Piedmont*. Lederer, Street & Zeus, Berkeley.

Greene Robertson, Merle

1974a "The Quadripartite Badge: A Badge of Rulership." In Merle Greene Robertson, ed., 1974b, pp. 77–93.

1985 *The Sculpture of Palenque, Vol. III: The Early Buildings of the Palace and the Wall Paintings*. Princeton University Press, Princeton.

Greene Robertson, Merle, Marjorie S. Rosenblum Scandizzo, and John R. Scandizzo

1976 "Physical Deformities in the Ruling Lineage of Palenque and the Dynastic Implications." In Merle Greene Robertson, ed., pp. 59–86.

Greene Robertson, Merle, Editor

1974b *Primera Mesa Redonda de Palenque*, Part I. Robert Louis Stevenson School, Pebble Beach.

1974c *Primera Mesa Redonda de Palenque*, Part II. Robert Louis Stevenson School, Pebble Beach.

1976 *The Art, Iconography & Dynastic History of Palenque*, Part III: *The Proceedings of the Segunda Mesa Redonda de Palenque*. Robert Louis Stevenson School, Pebble Beach.

Greene Robertson, Merle, General Editor, and Elizabeth P. Benson, Volume Editor

1985 *Fourth Palenque Round Table, 1980*, Vol. VI. The Pre-Columbian Research Institute, San Francisco.

Greene Robertson, Merle, General Editor, and Virginia M. Fields, Volume Editor

1985 *Fifth Palenque Round Table, 1983*, Vol. VII. The Pre-Columbian Research Institute, San Francisco.

Greene Robertson, Merle, and Donnan Call Jeffers, Editors

1979 *Tercera Mesa Redonda de Palenque*, Vol. IV. Pre-Columbian Art Research Center, Palenque and Monterey.

Gussinyer, Jordi, and Alejandro Martínez Muriel

1976/1977 "Una figurilla olmeca en un entierro del horizonte clásico." *Estudios de Cultura Maya*, Vol. 10, pp. 69–80.

Hammond, Norman

1972 "Classic Maya Music: Part I: Maya Drums." *Archaeology*, Vol. 25, No. 2, pp. 124–131.

1974 "Preclassic to Postclassic in Northern Belize." *Antiquity*, Vol. 48, pp. 177–189.

1981 "*Pom* for the Ancestors: A Reexamination of Piedras Negras Stela 40," *Mexicon*, Vol. 3, No. 5, pp. 77–79.

1982 "A Late Formative Period Stela in the Maya Lowlands." *American Antiquity*, Vol. 47, No. 2, pp. 396–403.

1987 *The Sun Also Rises: Iconographic Syntax of the Pomona Flare*. Center for

Maya Research, Research Reports on Ancient Maya Writing, No. 7. Washington, D.C.

Hammond, Norman, Editor

1977 *Social Processes in Maya Prehistory: Studies in Honour of Sir Eric Thompson.* Academic Press, London.

1979 *Cuello Project: 1978 Interim Report.* Archaeological Research Program, Publication 1, Douglass College, Rutgers University, New Brunswick, N.J.

Hansen, Richard D.

1984 "Excavations on Structure 34 and the Tigre Area, El Mirador, Peten, Guatemala: A New Look at the Preclassic Lowland Maya." Unpublished M.A. Thesis, Brigham Young University, Provo, Utah.

Heizer, Robert F., and John A. Graham, Editors

1971 *Observations on the Emergence of Civilization in Mesoamerica.* Contributions of the University of California Archaeological Research Facility, No. 11. Department of Archaeology, Berkeley.

Hellmuth, Nicholas

1978 *Tikal-Copan: A General Introduction to Maya Art, Architecture, & Archaeology.* Foundation for Latin American Anthropological Research, Guatemala.

1982 "Cosmology, Zoology, and Iconography of Early Peten Maya Cache Vessels and Incensarios." Handout for Princeton University Art Museum symposium, "The Beginnings of Maya Iconography." Foundation for Latin American Anthropological Research, Los Angeles.

1985 *Maya Cylindrical Tripods and Related Early Classic Art: Iconography and Form.* Corpus of Maya Art in Site Reports and in Museums and Private Collections, Guatemala, Honduras, Mexico, USA, Canada, Europe, and Asia, Vol. II. Foundation for Latin American Anthropological Research, Culver City.

1986 *The Surface of the Underwaterworld: Iconography of Maya Deities of Early Classic Art in Peten, Guatemala* (*Die obere Grenzschicht der Underwasserwelt: Ikonographie der Gottheiten in der frühklassischen Kunst der Maya im Peten, Guatemala*). Institute of Art History, Karl-Franzens-Universität, Graz.

Hofling, Charles Andrew

1982 *Itza Maya Morphosyntax from a Discourse Perspective.* Ph.D. dissertation, Washington University. University Microfilms, Ann Arbor.

Houston, Stephen D.

1984 "An Example of Homophony in Maya Script." *American Antiquity*, Vol. 49, No. 4, pp. 790–805.

Houston, Stephen D., and Peter Mathews

1985 *The Dynastic Sequence of Dos Pilas, Guatemala.* Monograph 1. Pre-Columbian Art Research Institute, San Francisco.

Jones, Christopher

1977 "Inauguration Dates of Three Late Classic Rulers of Tikal, Guatemala." *American Antiquity*, Vol. 42, No. 1, pp. 28–60.

Jones, Christopher, and Linton Satterthwaite

1982 *The Monuments and Inscriptions of Tikal: The Carved Monuments.* Tikal Report No. 33, Part A. The University Museum, University of Pennsylvania, Philadelphia.

Joralemon, Peter David

1971 *A Study of Olmec Iconography.* Studies in Pre-Columbian Art & Archaeology No. 7. Dumbarton Oaks, Washington, D.C.

1974 "Ritual Blood-Sacrifice among the Ancient Maya: Part I." In Merle Greene Robertson, ed. 1974b, pp. 59–75.

1976 "The Olmec Dragon: A Study in Pre-Columbian Iconography." In H. B. Nicholson, ed., pp. 27–71.

Josserand, J. Kathryn, Linda Schele, and Nicholas A. Hopkins

1985 "Linguistic Data on Mayan Inscriptions: The *Ti* Constructions." In Merle Greene Robertson and Elizabeth P. Benson, eds., pp. 87–102.

Justeson, John

1977 ''Universals of Language and Universals of Writing.'' In *Linguistic Studies Offered to Joseph Greenberg on the Occasion of His Sixtieth Birthday*, Vol. 1, pp. 57–94. Alphonse Juilland, Andrew M. Devine, and Laurence D. Stephens, eds. Anma Libri, Saratoga, Calif.

1978 *Mayan Scribal Practice in the Classic Period: A Test-Case of an Explanatory Approach to the Study of Writing Systems.* Ph.D. dissertation, Stanford University. University Microfilms, Ann Arbor.

1979a ''Chontal Maya Field Notes (Benito Juarez/San Carlos).'' Unpublished slip file.

1979b ''Variable and Antilinguistic Sign Order: A Comparative Analysis with Special Reference to Mayan Hieroglyphs.'' MS of paper presented at the Conference on Phoneticism in Mayan Hieroglyphic Writing, State University of New York, Albany.

1981 ''An Interpretation of the 'End of Month' and Glyph F Compounds in Mayan Hieroglyphic Writing.'' MS.

1984 ''Appendix B: Interpretations of Maya Hieroglyphs.'' In John S. Justeson and Lyle Campbell, eds., pp. 315–362.

1985 ''Hieroglyphic Evidence for Lowland Maya Linguistic History.'' *International Journal of American Linguistics.* Vol. 51, pp. 469–471.

1986 ''The Origin of Writing Systems: Preclassic Mesoamerica.'' *World Archaeology*, Vol. 17, pp. 437–458.

n.d. ''A Reading for the Glyph 'East.' '' MS.

Justeson, John S., and Lyle Campbell

1981 ''The Linguistic Background of Mayan Hieroglyphic Writing: Arguments against a 'Highland Mayan' Role.'' MS.

Justeson, John S., and Lyle Campbell, Editors

1984 *Phoneticism in Mayan Hieroglyphic Writing.* Institute for Mesoamerican Studies. State University of New York, Albany.

Justeson, John S., and William M. Norman

1982a ''Derivational Affixes in Mayan Hieroglyphic Writing: T23 and T713a.'' MS.

1982b ''Lowland Mayan **Iwal* as a Reading of the 'Posterior Event Indicator' in Mayan Hieroglyphic Writing.'' MS.

Justeson, John S., William M. Norman, Lyle Campbell, and Terrence Kaufman

1985 *The Foreign Impact on Lowland Mayan Language and Script.* Middle American Research Institute Publication 53. Tulane University, New Orleans.

Kampen, Michael E.

1972 *The Sculptures of El Tajín, Veracruz, Mexico.* University of Florida Press, Gainesville.

Kaufman, Terrence S.

1967 *Preliminary Mocho Vocabulary.* Laboratory for Language-Behavior Research, Working Paper, No. 5. University of California, Los Angeles.

1969 ''Teco: A New Mayan Language.'' *International Journal of American Linguistics*, Vol. 35, pp. 154–174.

1972 *El proto-tzeltal-tzotzil: Fonología comparada y diccionario reconstruido.* Centro de Estudios Mayas, Cuaderno 5. Universidad Nacional Autónoma de México, Mexico.

1974 *Idiomas de Mesoamérica.* Seminario de Integración Social Guatemalteca, Publicación 33. Ministerio de Educación, Guatemala.

Kaufman, Terrence S., and William M. Norman

1984 ''An Outline of Proto-Cholan Phonology, Morphology, and Vocabulary.'' In John S. Justeson and Lyle Campbell, eds., pp. 77–166.

Kellers, James McW.

1974 *A Tripartite Description of Jaina-style Figurines.* Ph.D. dissertation, New York University. University Microfilms, Ann Arbor.

Kelley, David H.
1962 "Glyphic Evidence for a Dynastic Sequence at Quirigua, Guatemala." *American Antiquity*, Vol. 27, No. 3, pp. 324–335.
1965 "The Birth of the Gods at Palenque." *Estudios de Cultura Maya*, Vol. 5, pp. 93–134.
1976 *Deciphering the Maya Script*. University of Texas Press, Austin.

Kidder, Alfred V.
1947 *Artifacts of Uaxactun*. Carnegie Institution of Washington, Publication 576. Washington, D.C.

Kidder, Alfred V., and Gordon F. Ekholm
1951 "Archaeological Specimens from Pomona, British Honduras." *Notes on Middle American Archaeology and Ethnology*, Vol. 6, No. 102. Carnegie Institution of Washington, Division of Historical Research, Cambridge, Mass.

Kidder, Alfred V., Jesse D. Jennings, and Edwin M. Shook
1946 *Excavations at Kaminaljuyu, Guatemala*. Carnegie Institution of Washington, Publication 561. Washington, D.C.

Kubler, George
1969 *Studies in Classic Maya Iconography*. Memoirs of the Connecticut Academy of Arts and Sciences 18. Archon Books, Hamden, Conn.
1977 *Aspects of Classic Maya Rulership on Two Incised Vessels*. Studies in Pre-Columbian Art & Archaeology No. 18. Dumbarton Oaks, Washington, D.C.

Landa, Diego de
1941 *Relación de las Cosas de Yucatan*. Papers of the Peabody Museum, Harvard University, Vol. XVIII. Alfred M. Tozzer, ed. Cambridge, Mass.

Las Casas, Bartolomé de
1909 *Apologética Historia de las Indias*. Bailliere e Hijos, Madrid.

Laughlin, Robert M.
1975 *The Great Tzotzil Dictionary of San Lorenzo Zinacantan*. Smithsonian Contributions to Anthropology, No. 9. Smithsonian Institution Press, Washington, D.C.

Leach, Edmund Ronald
1954 *Political Systems of Highland Burma*. Harvard University Press, Cambridge, Mass.

León, Juan de
1954 *Diccionario Quiché-Español*. Editorial Landivar, Guatemala.

León-Portilla, Miguel
1963 *Aztec Thought and Culture*. University of Oklahoma Press, Norman.

Lincoln, Charles E.
1985 "Ceramics and Ceramic Chronology." In Gordon R. Willey and Peter Matthews, eds., pp. 55–94.

Lothrop, Samuel K.
1926a *Pottery of Costa Rica and Nicaragua*. 2 vols. Museum of the American Indian, Heye Foundation, Vol. 8, New York.
1926b "Stone Sculptures from the Finca Arevale, Guatemala." *Indian Notes*, Vol. 3, No. 3, pp. 147–171. Museum of the American Indian, Heye Foundation, New York.

Lounsbury, Floyd G.
1973 "On the Derivation and Reading of the 'Ben-Ich' Prefix." In Elizabeth P. Benson, ed., pp. 99–143.
1974a "The Inscription of the Sarcophagus Lid at Palenque." In Merle Greene Robertson, ed., 1974b, pp. 5–19.
1974b "Pacal." In Merle Greene Robertson, ed. 1974b, p. ii.
1976 "A Rationale for the Initial Date of the Temple of the Cross at Palenque." In Merle Greene Robertson, ed., pp. 211–224.
1980 "Some Problems in the Interpretation of the Mythological Portion of the Hieroglyphic Text of the Temple of the Cross at Palenque." In *Third Palenque Round Table, 1978*, Part 2, Vol. 5, pp. 99–115. Merle Greene Robertson, ed. University of Texas Press, Austin.
1985 "The Identities of the Mythological Figures in the Cross Group Inscriptions of

Palenque." In Merle Greene Robertson and Elizabeth P. Benson, eds., pp. 45–58.

Love, Bruce
1986a *Yucatec Maya Ritual: A Diachronic Perspective*. Ph.D. dissertation, University of California, Los Angeles. University Microfilms, Ann Arbor.
1986b "A Text from the Dresden New Year Pages." Paper presented at the VI^e Mesa Redonda de Palenque.

Lowe, Gareth W.
1965 "Desarrollo y Función del Incensario en Izapa." *Estudios de Cultura Maya*, Vol. 5, pp. 53–64.

MacLeod, Barbara
1983 "An Epigrapher's Annotated Index to Cholan and Yucatecan Verb Morphology." Unpublished M.A. thesis, University of Texas, Austin.
1984 "Cholan and Yucatecan Verb Morphology and Glyphic Verbal Affixes in the Inscriptions." In John S. Justeson and Lyle Campbell, eds., pp. 233–262.

Maler, Teobert
1901 *Researches in the Central Portion of the Usumatsintla Valley*. Memoirs, Peabody Museum, Harvard University, Vol. 2, No. 1. Cambridge, Mass.
1903 *Researches in the Central Portion of the Usumatsintla Valley*. Memoirs, Peabody Museum, Harvard University, Vol. 2, No. 2. Cambridge, Mass.
1908 *Explorations of the Upper Usumacinta and Adjacent Region*. Memoirs, Peabody Museum, Harvard University, Vol. 4, No. 1. Cambridge, Mass.
1911 *Explorations in the Department of the Peten, Guatemala: Tikal*. Memoirs, Peabody Museum, Harvard University, Vol. 2, No. 1. Cambridge, Mass.

Mallery, Garrick
1881 "Sign Language among North American Indians." *First Annual Report of the Bureau of American Ethnography to the Secretary of the Smithsonian Institution, 1879–80*, pp. 263–552. Smithsonian Institution, Washington, D.C.

Martínez Hernández, Juan, Editor
1929 *Diccionario de Motul, maya español, atribuido a fray Antonio de Ciudad Real y arte de lengua maya por fray Juan Coronel*. Tipográfica Yucateca, Merida.

Mason, John A.
1943 *Examples of Maya Pottery in the Museum and Other Collections*, Vol. III. The University Museum, University of Pennsylvania, Philadelphia.

Matheny, R. T.
1980 *El Mirador, Peten, Guatemala: An Interim Report*. Papers of the New World Archaeological Foundation, No. 45. Brigham Young University, Provo, Utah.

Mathews, Peter
1977 "The Inscription on the Back of Stela 8, Dos Pilas, Guatemala." Paper presented at the International Conference on Maya Iconography and Hieroglyphic Writing, Guatemala.
1978 "The Dynastic Sequence of Bonampak, Chiapas, Mexico, Part 2." MS.
1979a "Glyphic Substitutions, 2: The 'Affix Cluster.' " Paper presented at the International Conference on Phoneticism in Mayan Hieroglyphic Writing, State University of New York, Albany.
1979b "The Glyphs on the Ear Ornaments from Tomb A–1/1." In David Pendergast, Vol. 1, pp. 79-80.
1982 "The Dynastic Sequence of Tonina, Chiapas, Mexico." In Pierre Becquelin and Claude Baudez, *Tonina, un cité Maya du Chiapas*, Vol. 2, pp. 894–902. Mission Archéologique et Ethnologique Française au Mexique, Paris.
1983 *Corpus of Maya Hieroglyphic Inscriptions, Vol. 6, Part 1: Tonina*. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Mass.
1985 "Maya Early Classic Monuments and Inscriptions." In Gordon E. Willey and Peter Mathews, eds., pp. 5–54.

Mathews, Peter, and John S. Justeson
1984 "Patterns of Sign Substitution in Maya Hieroglyphic Writing: 'The Affix

Cluster.' " In John S. Justeson and Lyle Campbell, eds., pp. 185–231.

Mathews, Peter, and Linda Schele
1974 "The Lords of Palenque—the Glyphic Evidence." In Merle Greene Robertson, ed., 1974b, pp. 63–75.

Maudslay, Alfred P.
1889–1902 *Biologia Centrali-Americana: Archaeology*. 5 vols. R. H. Porter and Dalau and Company, London.

McDonald, Andrew J.
1977 "Two Middle Preclassic Engraved Monuments at Tzutzuculi on the Chiapas Coast of Mexico." *American Antiquity*, Vol. 42, No. 4, pp. 560–566.

Miles, Suzanne W.
1957 "The Sixteenth-Century Pokom Maya: A Documentary Analysis of Social Structure and Archaeological Setting." *Transactions of the American Philosophical Society*, Vol. 47, pp. 731–781.
1963 "Informe sobre Kaminaljuyu." *Antropología e Historia de Guatemala*, Vol. 15, No. 2, pp. 35–38.
1965 "Sculpture of the Guatemala-Chiapas Highlands and Pacific Slopes, and Associated Hieroglyphs." In *Handbook of Middle American Indians*, Vol. 2, pp. 237–275. Robert Wauchope, gen. ed.; Gordon R. Willey, vol. ed. University of Texas Press, Austin.

Miller, Arthur G.
1982 *On the Edge of the Sea: Mural Painting at Tancah-Tulum, Quintana Roo, Mexico*. Dumbarton Oaks, Washington, D.C.

Miller, Jeffrey H.
1974 "Notes on a Stelae Pair Probably from Calakmul, Campeche, Mexico." In Merle Green Robertson, ed., 1974b, pp. 149–161.

Miller, Mary Ellen
1975 *Jaina Figurines: A Study of Maya Iconography*. The Art Museum, Princeton University.
1981 *The Murals of Bonampak, Chiapas, Mexico*. Ph.D. dissertation, Yale University.
1986 *The Murals of Bonampak*. Princeton University Press, Princeton.

Morán, Francisco
1695 *Arte en lengua choltí, que quiere decir lengua de milperos*. Photographic copy, Latin American Library, Tulane University. Facsimile ed. by William Gates.

Morley, Sylvanus G.
1937 *The Inscriptions of Peten*, Vol. V. Carnegie Institution of Washington, Publication 437. Washington, D.C.
1956 *The Ancient Maya*. 3d edition, revised by George W. Brainerd. Stanford University Press, Stanford.

Navarrete, Carlos
1984 *Guía para el estudio de los monumentos esculpidos de Chinkultic, Chiapas*. Universidad Nacional Autónoma de México, Mexico.

Nicholson, Henry B.
1971 "Religion in Pre-Hispanic Central Mexico." In *Handbook of Middle American Indians*, Vol. 10, pp. 395–451. Robert Wauchope, gen. ed.; G. F. Ekholm and I. Bernal, vol. eds. University of Texas Press, Austin.

Nicholson, Henry B., Editor
1976 *Origins of Religious Art and Iconography in Preclassic America*. UCLA Latin American Publications and Ethnic Arts Council of Los Angeles, Los Angeles.

Norman, Garth V.
1973 *Izapa Sculpture, Part I: Album*. Papers of the New World Archaeological Foundation, No. 30, Part 1. Brigham Young University, Provo, Utah.
1976 *Izapa Sculpture, Part II: Text*. Papers of the New World Archaeological Foundation, No. 30, Part 2. Brigham Young University, Provo, Utah.

Parsons, Lee Allen
1967 "An Early Maya Stela on the Pacific Coast of Guatemala." *Estudios de Cultura Maya*, Vol. 6, pp. 171–198.
1969 *Bilbao, Guatemala: An Archaeological Study of the Pacific Coast Cotzumalhuapa Region*, Vol. 2. Publications in An-

thropology 12, Milwaukee Public Museum.

1973 "Iconographic Notes on a New Izapan Stela from Abaj Takalik, Guatemala." In *Atti del XL Congresso Internazionale degli Americanisti* [Rome-Genoa, 1972], Vol. 1, pp. 203–212. Casa Editrice Tilgher, Genova.

1980 *Pre-Columbian Art: The Morton D. May and The Saint Louis Art Museum Collections*. Harper & Row, New York.

1981 "Post-Olmec Stone Sculpture: The Olmec-Izapan Transition on the Southern Pacific Coast and Highlands." In Elizabeth P. Benson, ed., pp. 257–288.

1983 "Altars 9 and 10, Kaminaljuyu, and the Evolution of the Serpent-winged Deity." In *Civilization in the Ancient Americas: Essays in Honor of Gordon R. Willey*, pp. 145–156. Richard Leventhal and Alan Kolata, eds. University of New Mexico Press, Albuquerque.

1986 *The Origins of Maya Art: Monumental Stone Sculpture of Kaminaljuyu, Guatemala and the Southern Pacific Coast*. Studies in Pre-Columbian Art & Archaeology No. 28. Dumbarton Oaks Research Library and Collection, Washington, D.C.

Paul, Anne

1976 "History on a Maya Vase?" *Archaeology*, Vol. 29, No. 2, pp. 118–126.

Pax, Mary

1983 "Dragons in Classic Maya Art." M.A. thesis, University of Texas, Austin.

Pendergast, David M.

1969 *Altun Ha, British Honduras (Belize): The Sun God's Tomb*. Royal Ontario Museum, Art and Archaeology, Occasional Paper 19, Toronto.

1979 *Excavations at Altun Ha, Belize, 1964–1970*, Vol. 1. Royal Ontario Museum, Toronto.

1981 "Lamanai, Belize: Summary of Excavation Results, 1974–80." *Journal of Field Archaeology*, Vol. 8, No. 1, pp. 29–53.

Pohl, John

1979 "Rain Gods and Flayed Skins: A Costume Element Associated with Arrow and Spear Sacrifice." Paper presented at the Dumbarton Oaks Conference on Ritual Sacrifice in Precolumbian Mesoamerica, Washington, D.C.

Poʔot Yah, Eleuterio, and Victoria R. Bricker

1981 *Yucatec Maya Verbs (Hocaba Dialect)*. Center for Latin American Studies, Tulane University, New Orleans.

Prem, Hanns J.

1971a "Calendrics and Writing." In Robert F. Heizer and John A. Graham, eds., pp. 112–131.

1971b "A Tentative Classification of Non-Maya Inscriptions in Mesoamerica." *Indiana*, No. 1, pp. 29–58.

Pring, Donald C.

1977 "Influence or Intrusion? The 'Protoclassic' in the Maya Lowlands." In Norman Hammond, ed., pp. 135–165.

Proskouriakoff, Tatiana

1946 *An Album of Maya Architecture*. Carnegie Institution of Washington, Washington, D.C.

1950 *A Study of Classic Maya Sculpture*. Carnegie Institution of Washington, Publication 593. Washington, D.C.

1960 "Historical Implications of a Pattern of Dates at Piedras Negras, Guatemala." *American Antiquity*, Vol. 25, No. 4, pp. 454–475.

1961 "Portraits of Women in Maya Art." In *Essays in Pre-Columbian Art and Archaeology*, pp. 81–99. Samuel K. Lothrop et al., eds. Harvard University Press, Cambridge, Mass.

1962 "The Artifacts of Mayapan." In *Mayapan, Yucatan, Mexico*, H.E.D. Pollock et al., eds. Carnegie Institution of Washington, Publication No. 619, pp. 321–442, Washington, D.C.

1963 "Historical Data in the Inscriptions of Yaxchilan, Part I." *Estudios de Cultura Maya*, No. 3, pp. 149–167.

1964 "Historical Data in the Inscriptions of Yaxchilan, Part II." *Estudios de Cultura Maya*, No. 4, pp. 177–202.

1965 "Sculpture and Major Arts of the Maya Lowlands." In *Handbook of Middle*

American Indians, Vol. 2, pp. 469–497. Robert Wauchope, gen. ed.; Gordon R. Willey, vol. ed. University of Texas Press, Austin.

1973 "The *Hand-grasping-fish* and Associated Glyphs on Classic Maya Monuments." In Elizabeth P. Benson, ed., pp. 165–178.

1974 *Jades from the Cenote of Sacrifice, Chichen Itza, Yucatan.* Memoirs of the Peabody Museum of Archaeology and Ethnology, Harvard University, Vol. 10, No. 1. Cambridge, Mass.

Quirarte, Jacinto

1973 *Izapan-style Art: A Study of Its Form and Meaning.* Studies in Pre-Columbian Art & Archaeology No. 10. Dumbarton Oaks, Washington, D.C.

1974 "Terrestrial/Celestial Polymorphs as Narrative Frames in the Art of Izapa and Palenque." In Merle Greene Robertson, ed., 1974b, pp. 129–135.

1979a "The Representation of Place, Location, and Direction on a Classic Maya Vase." In Merle Greene Robertson and Donnan Call Jeffers, eds., pp. 99–110.

1979b "The Representation of Underworld Processions in Maya Vase Painting: An Iconographic Study." In *Maya Archaeology and Ethnohistory*, pp. 116–148. Norman Hammond and Gordon R. Willey, eds. University of Texas Press, Austin.

1979c "Sculptural Documents on the Origins of Maya Civilization." In *Actes du XLII^e Congrès International des Américanistes* [Paris, 1976], Vol. 8, pp. 189–196.

1981 "Tricephalic Units in Olmec, Izapan-style, and Maya Art." In Elizabeth P. Benson, ed., pp. 289–308.

Rands, Robert

1955 "Some Manifestations of Water in Mesoamerican Art." *Bureau of American Ethnology Bulletin* 157, pp. 265-393. Smithsonian Institution, Washington, D.C.

Rappaport, Roy

1971 "The Sacred in Human Evolution." *Annual Review of Ecology and Systematics*, No. 2, pp. 23–44.

Rathje, William L.

1971 "The Origin and Development of Lowland Classic Maya Civilization." *American Antiquity*, Vol. 36, No. 3, pp. 275–385.

Rathje, William L., David A. Gregory, and Jeremy A. Sabloff

1973 "El descubrimiento de un jade olmeca en la isla de Cozumel." *Estudios de Cultura Maya*, No. 9, pp. 85–91.

Recinos, Adrian

1950 *Popol Vuh: The Sacred Book of the Ancient Quiche Maya.* Sylvanus G. Morley and Delia Goetz, trans. University of Oklahoma Press, Norman.

Recinos, Adrian, and Delia Goetz

1953 *Annals of the Cakchiquels.* University of Oklahoma Press, Norman.

Redfield, Robert, and Alfonso Villa Rojas

1934 *Chan Kom: A Maya Village.* Carnegie Institution of Washington, Publication 448. Washington, D.C.

Rediscovered Masterpieces of Mesoamerica: Mexico-Guatemala-Honduras

1985 Editions Arts 135, Boulogne.

Ricketson, Oliver G., Jr., and Edith B. Ricketson

1937 *Uaxactun, Guatemala, Group E: 1926–31.* Carnegie Institution of Washington, Publication 477, Washington, D.C.

Riese, Berthold

1984 "*Hel* Hieroglyphs." In John S. Justeson and Lyle Campbell eds., pp. 263–286.

Robertson-Freidel, Robin A.

1980 *The Ceramics from Cerros: A Late Preclassic Site in Northern Belize.* Unpublished Ph.D. dissertation, Harvard University.

Robertson, Robin A., and David A. Freidel, Editors

1986 *Archaeology at Cerros, Belize, Central America, Vol. 1: An Interim Report.* Southern Methodist University Press, Dallas.

Robicsek, Francis
1975 *A Study in Maya Art and History: The Mat Symbol.* Museum of the American Indian, Heye Foundation, New York.
1977 "Sacrificial Procedures in Classic Peten Maya Heart Removal and Decapitation." Paper presented at the International Symposium on Maya Art, Architecture, Archaeology, and Hieroglyphic Writing, Guatemala City.
1978 *The Smoking Gods: Tobacco in Maya Art, History, and Religion.* University of Oklahoma Press, Norman.
Robicsek, Francis, and Donald M. Hales
1981 *The Maya Book of the Dead: The Ceramic Codex.* University of Virginia Art Museum, Charlottesville.
1982 *Maya Ceramic Vases from the Classic Period: The November Collection of Maya Ceramics.* University Museum of Virginia, Charlottesville.
Roys, Ralph L.
1965 *Ritual of the Bacabs.* University of Oklahoma Press, Norman.
1967 *The Book of Chilam Balam of Chumayel.* University of Oklahoma Press, Norman.
1972 *The Indian Background of Colonial Yucatan.* University of Oklahoma Press, Norman.
Ruppert, Karl, J. Eric S. Thompson, and Tatiana Proskouriakoff
1955 *Bonampak, Chiapas, Mexico.* Carnegie Institution of Washington, Publication 602. Washington, D.C.
Ruz Lhuillier, Alberto
1968 *Costumbres Funerarias de Los Antiguos Mayas.* Universidad Nacional Autónoma de México, Mexico.
1970 *The Civilization of the Ancient Maya.* Instituto Nacional de Antropología y Historia, Mexico.
1973 *El Templo de las Inscripciones, Palenque.* Instituto Nacional de Antropología y Historia, Mexico.
Sahagún, Fray Bernardino de
1950–1963 Florentine Codex. A.J.C. Anderson and Charles E. Dibble, trans. 10 vols. School of American Research, Santa Fe.
Sahlins, Marshall
1976 *Culture and Practical Reason.* University of Chicago Press, Chicago.
Saville, Marshall H.
1925 *The Wood-Carver's Art in Ancient Mexico.* Heye Foundation, New York.
1929 *The Aztecan God Xipe Totec.* Indian Notes. Museum of the American Indian, Heye Foundation, New York.
Scarborough, Vernon Lee
1980 *The Settlement System in a Late Preclassic Community: Cerros, Northern Belize.* Ph.D. dissertation, Southern Methodist University. University Microfilms, Ann Arbor.
Scarborough, Vernon, Beverly Mitchum, Sorayya Carr, and David Freidel
1982 "Two Late Preclassic Ballcourts at the Lowland Maya Center of Cerros, Northern Belize." *Journal of Field Archaeology,* Vol. 9, pp. 21–34.
Schele, Linda
1974 "Observations on the Cross Motif at Palenque." In Merle Greene Robertson, ed., 1974b, pp. 41–61.
1976 "Accession Iconography of Chan-Bahlum in the Group of the Cross at Palenque." In Merle Greene Robertson, ed., pp. 9–34.
1978 *Notebook for the Maya Hieroglyphic Writing Workshop.* Institute of Latin American Studies, University of Texas, Austin.
1979a "Genealogical Documentation on the Tri-figure Panels at Palenque." In Merle Greene Robertson and Donnan Call Jeffers, eds., pp. 41–70.
1979b *Notebook for the Maya Hieroglyphic Workshop, March 14–25, 1979.* Institute of Latin American Studies, University of Texas, Austin.
1979c "The Palenque Triad: A Visual and Glyphic Approach." In *Actes du Congrès International des Américanistes* [Paris, 1976], Vol. 7, pp. 407–423.
1980 *Verb Morphology and Syntax of the*

Maya Hieroglyphic Writing System. Ph.D. dissertation, University of Texas, Austin.

1981 *The 1981 Workbook for the Maya Hieroglyphic Writing Workshop at Texas.* Institute of Latin American Studies, University of Texas, Austin.

1982 *Maya Glyphs: The Verbs.* University of Texas Press, Austin.

1984a "Human Sacrifice Among the Classic Maya." In *Ritual Human Sacrifice in Mesoamerica*, pp. 6–48. Elizabeth H. Boone, ed. Dumbarton Oaks, Washington, D.C.

1984b "Some Suggested Readings for the Event and Office of Heir-Designate at Palenque." In John S. Justeson and Lyle Campbell, eds., pp. 287–305.

1985a "Balan-Ahau: A Possible Reading of the Tikal Emblem Glyph and a Title at Palenque." In Merle Greene Robertson and Elizabeth P. Benson, eds., pp. 59–65.

1985b "The Hauberg Stela: Bloodletting and the Mythos of Maya Rulership." In Merle Green Robertson and Virginia M. Fields, eds., pp. 135–149.

n.d.a "An Analysis of the Sides of the Sarcophagus in the Temple of the Inscriptions at Palenque." MS.

n.d.b "A Preliminary Study of Pictorial Devices Used in Maya Narrative Art." MS.

Schele, Linda, and Peter Mathews

1979 *The* Bodega *of Palenque, Chiapas, Mexico.* Dumbarton Oaks, Washington, D.C.

Schele, Linda, Peter Mathews, and Floyd Lounsbury

1977 "Parentage Expressions in Classic Maya Inscriptions." Paper presented at the International Conference on Maya Iconography and Hieroglyphic Writing, Guatemala City.

Schele, Linda, and Jeffrey H. Miller

1983 *The Mirror, the Rabbit, and the Bundle: "Accession" Expressions from the Classic Maya Inscriptions.* Studies in Pre-Columbian Art & Archaeology No. 25. Dumbarton Oaks, Washington, D.C.

Schele, Linda, and Mary Ellen Miller

1986 *The Blood of Kings: Dynasty and Ritual in Maya Art.* Kimbell Art Museum, Fort Worth, Tex.

Schellhas, Paul

1904 *Representation of Deities in the Maya Manuscripts.* Papers of the Peabody Museum, Harvard University, Vol. 4, No. 1. Cambridge, Mass.

Scholes, France V., and Eleanor B. Adams

1938 *Don Diego Quijada, Alcalde Mayor de Yucatán, 1561–1565: Documentos Sacados de los Archivos de España.* Vol. 1. Introducción y Documentos X–XXXIII. Biblioteca Histórica Mexicana de Obras Inéditos, 14. Mexico.

Schumann, Otto

1978 "Vocabulario Chorti." MS.

Scott, John F.

1977 "El Mesón, Veracruz, and its Monolithic Reliefs." *Baessler-Archiv: Beitrage zur Völkerkunde*, N. F. Band XXV, Heft I, pp. 83–138. Museum für Völkerkunde und Verlag von Dietrich Reimer, Berlin.

1978 *The Danzantes of Monte Albán.* 2 vols. Studies in Pre-Columbian Art & Archaeology No. 19. Dumbarton Oaks, Washington, D.C.

Séjourné, Laurette

1970 *Arqueología del valle de Mexico, I: Culhuacán.* Instituto Nacional de Antropología e Historia, Mexico.

Seler, Eduard

1902-1923 *Gesammelte Alhandlungen zur Amerikanischen Sprach und Altertumskunde.* 5 vols. A. Asher & Co., Berlin.

1904 "The Mexican Chronology, with Special Reference to the Zapotec Calendar." In *Mexican and Central American Antiquities, Calendar Systems, and History.* Bureau of American Ethnology, Bulletin 28, pp. 11–55. Smithsonian Institution, Washington, D.C.

1915 *Beobachtungen und Studien in den Ruinen von Palenque.* Verlag der Königl. Akademie der Wissenschafter, Berlin.

1963 *Comentarios al Códice Borgia.* Fondo de Cultura Económica, Mexico.

Sharer, Robert J., and David W. Sedat
1973 "Monument 1, El Porton, Guatemala, and the Development of Maya Calendrical Writing Systems." In *Papers on Mesoamerican Archaeology*. Contributions of the University of California Archaeological Research Facility, No. 18, pp. 177–194. Department of Archaeology, Berkeley.

Sharer, Robert J., Editor
1978 *The Prehistory of Chalchuapa, El Salvador*. 3 vols. University of Pennsylvania Press, Philadelphia.

Sheets, Payson D.
1979 "Environmental and Cultural Effects of the Ilopango Eruption in Central America." In *Volcanic Activity and Human Ecology*, pp. 525–564. Payson D. Sheets and Donald K. Grayson, eds. Academic Press, New York.

Shook, Edwin M.
1965 "Archaeological Survey of the Pacific Coast of Guatemala." In *Handbook of Middle American Indians*, Vol. 2, pp. 180-194. Robert Wauchope, gen. ed., Gordon R. Willey, vol. ed. University of Texas Press, Austin.

Shook, E. M., and A. V. Kidder
1952 *Mound E–III–3, Kaminaljuyu, Guatemala*. Carnegie Institution of Washington, Publication 596; Contributions to American Anthropology and History, No. 53, Washington, D.C.

Slocum, Marianna C., and Florencia L. Gerdel
1965 *Vocabulario tzeltal de Bachajon: Castellano-tzeltal, tzeltal-castellano*. Instituto Lingüístico de Verano, Mexico.

Smailus, Ortwin
1982 Paper given at the 6th Taller Maya, San Cristóbal de Las Casas.

Smith, A. Ledyard
1950 *Uaxactun, Guatemala: Excavations of 1931–1937*. Carnegie Institution of Washington, Publication 588, Washington, D.C.
1972 *Excavations at Altar de Sacrificios*. Papers of the Peabody Museum, Harvard University, Vol. 62, No. 2, Cambridge, Mass.

Smith, A. Ledyard, and Alfred V. Kidder
1951 *Excavations at Nebaj, Guatemala*. Carnegie Institution of Washington, Publication 594, Washington, D.C.

Smith, Robert E.
1937 *A Study of Structure A–I Complex at Uaxactun, Peten, Guatemala*. Carnegie Institution of Washington, Contributions to American Archaeology, No. 19, Washington, D.C.
1955 *Ceramic Sequence at Uaxactun, Guatemala*. Middle American Research Institute Publication 20. Tulane University, New Orleans.

Spinden, Herbert J.
1913 *A Study of Maya Art*. Memoirs of the Peabody Museum, Harvard University, Vol. 6. Cambridge, Mass.

Steck, Francis Borgia
1951 *Motolinía's History of the Indians of New Spain*. Academy of American Franciscan History, Washington, D.C.

Stevenson, Robert
1968 *Music in Aztec and Inca Territory*. University of California Press, Berkeley.

Stirling, Matthew W.
1943 *Stone Monuments of Southern Mexico*. Bureau of American Ethnology, Bulletin 138. Smithsonian Institution, Washington, D.C.
1957 *An Archaeological Reconnaissance in Southeastern Mexico*. Bureau of American Ethnology, Bulletin 164; Anthropological Papers, No. 53, pp. 213–240. Smithsonian Institution, Washington, D.C.

Stone, Andrea
1983 *The Zoomorphs of Quirigua, Guatemala*. Ph.D. dissertation, University of Texas, Austin.

Stone, Doris
1972 *Pre-Columbian Man Finds Central America: The Archaeological Bridge*. Peabody Museum Press, Harvard University, Cambridge, Mass.

Stuart, David
1984 "A Note on the 'Hand-Scattering'

Glyph." In John S. Justeson and Lyle Campbell, eds., pp. 307–310.

Tate, Carolyn
1985 "The Carved Ceramics Called Chochola." In Merle Greene Robertson and Virginia M. Fields, eds., pp. 123–133.

Taube, Karl
1979 "A Study of Contemporary Yucatec Cattle Ceremonies." MS.
1980 "The Deer and Vulture in Classic Maya Religion." Senior Honors Thesis, University of California, Berkeley.

Taylor, Dicey
1979 "The Cauac Monster." In Merle Greene Robertson and Donnan Call Jeffers, eds., pp. 79–89.

Thompson, J. Eric S.
1929 "Maya Chronology: Glyph G of the Lunar Series." *American Anthropologist*, Vol. 31, pp. 223–231.
1931 *Archaeological Investigations in the Southern Cayo District, British Honduras*. Field Museum of Natural History Anthropology Series, Vol. 17, No. 3. Chicago.
1943 "Some Sculptures from Southeastern Quetzaltenango, Guatemala." *Notes on Middle American Archaeology and Ethnology*, Vol. 1, No. 17, pp. 100–112. Carnegie Institution of Washington, Division of Historical Research, Cambridge, Mass.
1944a "The Dating of Seven Monuments at Piedras Negras." *Notes on Middle American Archaeology and Ethnology*, No. 2, pp. 65–82. Carnegie Institution of Washington, Washington, D.C.
1944b *The Fish as a Maya Symbol for Counting and Further Discussion of Directional Glyphs*. Carnegie Institution of Washington, Division of Historical Research, Theoretical Approaches to Problems, No. 2. Cambridge, Mass.
1946 "Tattooing and Scarification among the Maya." *Notes on Middle American Archaeology and Ethnology*, Vol. 3, No. 63. Carnegie Institution of Washington, Division of Historical Research, Cambridge, Mass.
1950 *Maya Hieroglyphic Writing: Introduction*. Carnegie Institution of Washington, Publication No. 593, Washington, D.C.
1961 "A Blood-Drawing Ceremony Painted on a Maya Vase." *Estudios de Cultura Maya*, No. 1, pp. 13–20.
1962 *A Catalog of Maya Hieroglyphs*. University of Oklahoma Press, Norman.
1970 *Maya History and Religion*. University of Oklahoma Press, Norman.
1971 *Maya Hieroglyphic Writing: An Introduction*. University of Oklahoma Press, Norman.
1972 *A Commentary on the Dresden Codex*. American Philosophical Society, Philadelphia.

Townsend, Richard
1984 *The Art of Tribes and Early Kingdoms: Selections from Chicago Collections*. Art Institute of Chicago.

Tozzer, Alfred M.
1907 *A Comparative Study of the Mayas and Lacandones*. New York.

Tozzer, Alfred M., and Glover M. Allen
1910 *Animal Figures in the Maya Codices*. Papers of the Peabody Museum, Harvard University, Vol. 14, No. 3, pp. 273–372. Cambridge, Mass.

Trik, Aubrey S.
1963 "The Splendid Tomb of Temple I at Tikal, Guatemala." *Expedition*, Vol. 6, No. 1, pp. 2-18.

Troike, Nancy
1979 "The Arrow Sacrifice Ceremony in the Mixtec Historical Codices." Paper presented at the XLIII International Congress of Americanists, Vancouver.

Ulrich, Matthew W., and Rosemary Ulrich
1976 *Diccionario bilingüe: maya-mopán y español, español y maya-mopán*. Instituto Lingüístico de Verano, Guatemala.

Ventur, Pierre
1976 "Itza and Mopan Texts." MS.

Villagra Caleti, Agustin
1949 *Bonampak, la ciudad de los muros pintados*. Instituto Nacional de Antropología e Historia, Mexico.

Wetherington, Ronald K., Editor
1978 *The Ceramics of Kaminaljuyu, Guatemala*. The Pennsylvania State University Press Monograph Series on Kaminaljuyu, University Park.

Wilk, Richard R., Donald C. Pring, and Norman Hammond
1975 "Settlement Pattern Excavations in the Northern Sector of Nohmul." In *Archaeology in Northern Belize: British Museum–Cambridge University Corozal Project 1974–75 Interim Report*, pp. 73–108. Cambridge University Centre of Latin American Studies.

Wilkerson, S. Jeffrey K.
1980 "Man's Eighty Centuries in Veracruz." *National Geographic*, Vol. 158, No. 2, pp. 202-231.

Willey, Gordon R., Editor
1974 *Das alte Amerika*. Propyläen Kunstgeschichte, Vol. 18. Propyläen Verlag, Berlin.

Willey, Gordon R., and Peter Mathews, Editors
1985 *A Consideration of the Maya Early Classic Period in the Maya Lowlands*. Institute for Mesoamerican Studies, Publication No. 10. State University of New York, Albany.

Wisdom, Charles
1940 *The Chorti Indians of Guatemala*. University of Chicago Press, Chicago.

Wray, Peter G.
1984 *Masterpieces of Pre-Columbian Art from the Collection of Mr. and Mrs. Peter G. Wray*. Andre Emmerich Gallery, Perls Galleries, New York.

Index

ab/ah, 70, 71, 318
Abaj Takalik, 6, 7, 9, 12, 18, 22, 24, 25, 26, 28, 35, 40, 41, 148, 149, 152, 164
Acanceh, 44, 51
accession, 58, 91, 116, 135, 139, 178, 183, 195, 215, 294, 301, 308, 312, 316, 331, 340, 341, 343, 345, 346
Acosta, Jorge, 299
Adams, Richard, 294, 296, 298
agriculture, 235, 331, 332–335, 340, 343, 346, 350–351
Ah Bolon-Dzacab, 85, 218
ahau, 58, 59, 71, 72, 76, 84, 85, 148, 156, 159, 168, 169, 280, 284, 298, 303, 304, 305, 306, 307, 310, 335n
akbal, 15, 25, 115, 190, 192, 267, 308
alligator. *See* crocodilian
Alta Verapaz, 294
Altar de Sacrificios, 223–225, 227, 228, 234, 267, 294–299, 304, 310, 314–316
Altun Ha, 105, 228, 229, 232, 234
Alvarado column, 37
American Museum of Natural History, 100
ancestor, 91, 162, 181, 189, 199, 201, 203, 205, 212, 215, 219, 221, 234, 308, 310, 313, 314
Andean cultures, 278
Anderson, Harry D., 98, 99, 100, 105, 108
Annals of the Cakchiquels, 337, 341
architecture, 7, 12, 16, 22, 34, 37, 38, 42, 44–57, 62, 64–67, 78, 80–82, 86, 87, 90, 99, 115, 143, 222, 223, 233, 234, 235, 277, 291, 299–300, 308, 313, 316, 322, 340
Arenal phase, 6, 7, 9, 10, 11, 14, 15–20, 22, 24, 26, 28, 32, 35, 38, 39, 40, 41
Arostegui, Carlos, 322n
Asia, 278
astronomy, 80–82, 151, 181, 274, 275, 277–293, 310
atlatl. *See* weapons
Aulie and Aulie, 307n
Aurora phase, 34, 41, 43
axe, 20, 24, 25, 28, 30, 40, 66, 99, 228, 266, 267, 271, 272, 276, 296, 308, 313, 338
Aztec, 137, 223, 225, 226, 227, 228, 231, 232, 322, 324, 333, 347

b'a/b'ah, 136, 137, 301, 305
Bacab, 203
Bagaces, 114, 148
Baja Verapaz, 35
Balakbal, 116, 117, 124
balam/balan, 71, 84, 298, 304, 305, 310
ballgame/ballplayer, 8, 16, 18, 22, 24, 36, 37–38, 75, 163, 302
Barrera Vásquez, Alfredo, 80, 306
Barthel, Thomas, 137, 138, 143
Barton Ramie, 100, 101, 104
beard, 28, 30, 37, 159, 184, 249, 343
Belize, 18, 38, 41, 45, 95, 98, 99, 100, 101, 102, 104, 105, 107, 130, 146, 155, 232
Bellhouse, Alfred P., 98, 99, 100, 105, 108
Benson, Elizabeth, 159n
Berlin, Heinrich, 42, 70, 175, 315
bib-and-helmet, 97, 105–107, 116, 117, 144, 145
Bilbao, 7, 12, 32, 33, 34, 40
bird, 6n, 62, 164, 165, 166, 167, 168, 169, 172, 199, 209, 230, 338. *See also* owl; vulture
birth, 18, 23, 92n, 138n, 139, 192, 193, 208, 212, 226, 227, 233, 312, 313, 315, 316, 337, 341, 343
Black Background Vase, 321
Blair, Robert, 128
Blom, Frans, 156
Blom and LaFarge, 346, 347
Blom plate, 156, 168, 169, 172
blood/bloodletting, 66, 73, 76, 85, 91–92, 132, 146, 166, 168, 169, 171, 173, 175–221, 225–227, 231, 233–234, 235, 257, 262, 267, 311, 332, 333, 334, 337, 341, 344, 345, 346, 348, 350
Bolon Yocte, 305
Bonampak, 58, 59, 140, 141, 181, 231, 298, 318–330, 337
bone, 76, 131, 156, 168, 169, 171, 181, 189, 212, 226, 227, 230, 233, 260, 261, 262, 263, 290, 301, 304, 315

Books of Chilam Balam, 138, 262, 333, 341
Boos, Frank, 333n
Borgia Codex, 226, 232
Borhegyi, Stephan, 24, 43
Bricker, Victoria, 110, 128, 132, 134n, 337
British Honduras, 99, 100
British Museum, 100
Bruce, Robert, 128
bundle, 233, 258, 343, 344, 345, 351
burial, 9, 15, 20, 22, 26, 39, 40, 45, 55, 58, 59, 60, 68, 83, 90, 95, 98–105, 108, 146, 155, 168, 169, 171, 172, 189, 198–202, 222–235, 278, 279, 280, 281, 291, 292, 294, 296, 299, 301, 302, 314, 315, 316, 322n
Burkitt, Robert, 30
Burma, 89

caan, chan, 73, 74, 166n, 173, 190, 348
caban, 281, 287, 288, 292
cache, 64, 67, 76, 105, 106, 107, 116, 146, 232
cache lid/vessel, 62, 63, 77, 156, 158, 159, 160, 162, 168, 169, 172, 250
caiman. *See* crocodilian
Cakchiquel, 337, 348
Calcehtok Vase, 338, 339, 343
Calendar Round, 176, 190, 208, 272, 294, 304, 307, 311, 313
Camaxtli, 332
Cambridge University, 154
Campeche, 155, 175, 176, 325, 334, 335, 336
canoe, 18, 76, 86, 263, 300–302, 315
Caracol, 63, 64, 70, 71, 72, 84, 161
Carlson, John, 278
Carlson and Landis, 277, 278, 279, 280
Carnegie Institution of Washington, 44, 318
Caso and Bernal, 343
cauac, 76, 206, 267, 271, 304, 305
Cauac Monster, 162, 163, 206, 270, 271, 272, 274, 275, 276
Cauac phase, 8n, 12, 38, 39, 40, 49
celestial. *See* sky/skyband
Celestial Dragon/Monster, 62, 72–80, 82, 83, 84, 85, 86, 91, 93, 193, 194, 195, 198, 203, 204, 205, 206, 208, 209, 210, 212, 221, 277, 293
ceremonial bar, 72–80, 85, 156, 159, 161, 166, 173, 181, 206, 208, 209, 212, 216, 219, 221, 228, 277
Cerros, 18, 38, 39, 45–53, 58, 59, 60, 61, 62, 63, 64, 67, 68, 72, 73, 74, 76, 77, 79, 80–84, 86, 87, 90, 91, 92, 93, 105, 106, 107, 108, 116, 144, 146
Chac, 115, 126, 132, 144n, 290, 338, 340
Chalcatzingo, 22
Chalchuapa, 6, 9, 18
Chama, 169, 294, 327
Champoton, 325, 326
Chamula, 337
chan. See *caan, chan*
Chan Kom, 338, 340
Cheek, Charles, 8n
Chetumal, 158
Chiapa de Corzo, 28, 30, 35, 36, 40
Chiapas, 96, 146, 231
Chicanel phase, 12, 38, 104
chicchan, 303, 344, 346, 348
Chichen Itza, 35, 37, 97, 106, 115, 148, 149
Chinchilla-Aguilar, 331n
Chinese, 125n
Chinikiha, 270
Chinkultic, 135, 336, 348, 350
Chochola, 262, 263
Chocola, 12, 28, 30, 34, 38, 39, 40
Cholan, 73, 79, 80, 95, 109, 122, 126, 128, 130n, 132, 134, 140, 146, 147, 148, 303n, 307n, 348
Cholula, 49
Chontal, 130n, 134
Chorti, 130n, 344, 348
Chuen phase, 49
cimi, 290, 298, 314
Cimi phase, 39
Cincinnati flare, 144–145
cinnabar. *See* red pigment
Cit Chac Coh, 334
Clancy, Flora, 350
Classic, 7, 8, 14, 15, 18, 35, 37, 41, 50, 57, 58, 60, 62, 68, 69, 73, 74, 75, 76, 78, 80, 82, 83, 84, 85, 86, 87, 91, 92, 109, 117, 134, 140, 142, 143, 146, 148, 175, 181, 188, 222, 225, 227, 228, 229, 230, 231, 234, 235, 276, 278, 315, 318, 319, 330, 331, 333, 334n, 335, 336, 337, 338, 340, 343, 345, 346, 348, 350, 351
cloth, 137, 178, 195, 233, 267, 343, 345, 346
clothing. *See* costume
codex, 117, 126, 147n, 163, 228–229, 260, 274, 277, 281, 288, 345. *See also by name*
Codex Rios/Vaticanus A, 232
Coe, M. D., 35, 36, 40, 58, 60, 115, 117, 129, 140, 148, 150, 154, 155, 160, 169, 215, 249, 260, 263, 267, 270, 271, 274, 278, 279, 280, 288, 290, 296, 315, 335, 337
Coe, M. D., and Benson, 311
Coe, W. R., 7, 39, 40
Coggins, Clemency, 76
Colson Point, 105

copal, 106, 231–232
Copan, 63, 73, 83, 85, 162, 163, 164, 166, 194, 203, 204, 206, 210, 212, 214, 215, 221, 231, 303, 315
corn, Corn God, 111, 114, 116, 117, 118, 120n, 123, 132, 133, 138n, 142n, 143, 144n, 149
Costa Rica, 114, 126, 128, 148
costume, 8, 11, 12, 16, 20, 24, 25, 30, 31, 32, 34, 35, 36, 37, 38, 39, 61–67, 83, 85, 156, 161, 178, 181, 182, 183, 233–234, 257, 267, 277, 298, 302, 308, 310, 314, 318, 320, 321, 322, 329, 333, 335, 343
Cotzumalhuapa, 8, 9, 38
Covarrubias text, 114, 124, 131, 132, 146, 148
Coyolxauhqui, 159n
Cozumel Island, 146
Crocker, Lin, 152, 271
crocodilian, 74, 75, 76, 78, 162, 163, 164, 165, 166, 167, 171, 172, 230, 274
crossed bands, 66, 73, 75, 158, 159, 161, 162, 163, 164, 166, 204, 206, 266, 267, 277, 280, 288
crosshatching, 156, 159, 195, 203, 345
Cuello, 41, 49, 50, 89, 90, 104, 105
Culhuacan, 163
Cycle 7, 6, 9, 11, 35, 148
Cycle 8, 9, 11, 22, 35, 40, 41, 42, 117
Cycle 9, 41

Dainzu, 18, 36, 38
dance, 231, 263, 266, 271, 273, 294–316, 318, 334, 335
Dávalos, Felipe, 321, 322
death/Death God/Death Lords, 16, 117, 118, 156, 159, 168, 171, 172, 173, 222–235, 260, 261, 263, 267, 271, 272, 273, 277, 279, 281, 285, 289, 292, 294–330, 334
deer, 20, 71, 76, 147n, 148n, 230, 270, 273, 296, 321, 322, 333, 334, 338, 341, 343, 344, 345, 346, 348, 350, 351
Deletaille, Christine, 152
Deletaille tripod, 76, 77, 152–173
Diccionario Quiche-Espanol, 274
Digby, Adrian, 96, 109, 110
"diving god," 8, 9, 24, 42, 165
dog, 230–231, 250, 263, 270, 315
Dos Pilas, 135, 192, 193, 208
dragon, 8, 14, 15, 16, 18, 20, 22, 23, 24, 25, 26, 30, 31, 34, 35, 36, 37, 39, 40, 156, 162, 163, 164, 166, 169, 171, 172, 173, 193, 198, 199, 249, 277, 278, 279, 291, 293, 296, 314, 343
Dresden Codex, 114, 118, 126, 127, 131n, 132, 277, 288, 337, 345, 346, 348
Drucker, Philip, 37
DuBois, John, 147n
Dumbarton Oaks, 15, 35, 40, 59, 60, 62, 83, 116, 117, 160n, 233, 266, 267, 272, 294, 299, 300, 302, 308–313, 314, 316, 322, 327, 333, 338
Dütting, Dieter, 134n, 271

ear-flare/ear ornament/earplug, 11, 12, 15, 16, 22, 26, 30, 31, 35, 38, 50–51, 53, 55, 60, 61, 66, 67, 68, 76, 78, 79, 95–100, 105, 108, 109, 110, 112, 113, 114, 115, 116, 144, 167n, 310, 313, 323
Early Classic, 7, 10, 37, 40, 41, 42, 43, 55, 61, 62, 63, 64, 66, 67, 69, 71, 74, 76, 87, 89, 93, 95, 96, 97, 98, 100, 101, 105, 106, 115, 117, 124, 125, 126, 128, 130, 140, 148, 149, 152, 154, 155, 156, 158, 161, 162, 166, 168, 170, 171, 172, 173, 223, 224, 228, 231, 302
earth/earth monster, 14, 16, 18, 23, 82, 86, 195, 206, 279, 288, 292, 323, 332, 341, 348, 350
Easby and Scott, 106
Edzna, 161
Egyptian, 125n, 150
Ekholm, Gordon, 98, 99, 100, 101
El Baúl, 7, 35
El Jobo, 36
El Mesón, 36–37
El Mirador, 15, 17, 39, 41, 45, 49, 50, 51, 52, 53, 55, 61, 67, 80, 93, 97n
El Peten, 7, 15, 17, 22, 34, 36, 38, 42, 43, 44, 45, 49, 154, 155, 157, 159, 160, 164, 166, 167n, 168, 169, 171, 183, 184, 228, 232, 234, 294, 315
El Portón, 35
El Salvador, 7, 18, 35, 43, 96
El Tajin, 37, 340–341, 350
El Trapiche, 35
El Zapote, 42, 64, 124, 125, 160, 161
El Zotz', 62
Emblem Glyph, 62, 63, 69, 71, 72, 139, 181, 226, 294, 298, 299, 304
enema, 169, 229–230, 235, 270, 289, 291, 293, 329
Escuintla, 7, 12, 13, 34
Esperanza phase, 15, 228, 230, 231
Espinosa, Gustavo, 22, 23, 24, 28

feathers, 8, 11, 12, 30, 32, 36, 40, 62, 226, 231, 257, 258, 320, 341
feline, 12, 156, 158, 165, 168, 233, 261, 315, 321

figurines, 68, 85, 98, 100, 105–106, 175, 333, 335, 343
firefly, 249, 250, 267
fish/fisherman, 9, 62, 66, 83, 132, 146, 162, 182, 184, 190, 208, 215, 262, 263, 266, 315, 320, 322, 345. *See also* stingray
flint, 24, 25, 30, 225, 232, 234, 267, 271, 280, 337
Florentine Codex, 333
Florida State Museum, 321, 322
flower, 72, 78, 169, 171
footgear, 8, 10, 11, 12, 20, 25, 32, 34, 66
Förstemann, Ernst, 277
Fox, James, 147n, 346n
Fox and Justeson, 126, 135, 147n
Freidel, David, 38, 39, 72, 143
Freidel and Schele, 143, 166
frescoes. *See* murals
frog. *See* toad
Fuentes y Guzmán, Antonio de, 223

GI/GII/GIII. *See* Palenque Triad
Gagavitz, 341
Gammon, Samuel, 98, 100, 105, 108
Generale Bankmaatschappij, 152
God A, 231, 249, 250, 253, 344, 345
God B, 126, 290
God C, 70, 71, 182, 184, 187, 188, 190, 201–203, 208, 209, 212, 267, 311
God D, 288, 289
God G, 137
God I, 18
God K, 66, 80, 85, 91, 164, 172, 183, 184, 201, 206, 212, 215, 218, 228, 234, 271, 272, 300, 302, 303, 304, 305, 306, 307, 308, 311, 313, 314
God L, 242
God N, 150, 154, 159, 230, 239, 288, 289, 290
Goldstein, Marilyn, 333
Goodman-Martínez-Thompson correlation, 335, 346
Graham, Elizabeth, 98, 100, 105
Graham, Ian, 42
Graham, John A., 95, 96, 108, 146, 148
Greene Robertson, Merle, 75, 193, 314
Griffin, Gillett, 117
Grolier Club, 329
Grolier Codex, 260
Guatemala, 6–43, 57, 96, 152, 172, 175, 190, 276
Guerrero, 22
Gulf Coast, 8, 36

Hairs, Joya, 32
Hammond, Norman, 41, 322n
Hanks, William, 129, 133, 143
Hauberg stela, 41, 115, 162, 163, 164, 166, 219–221
headdress, 8, 11, 12, 16, 18, 20, 22, 25, 26, 31, 35, 38, 39, 42, 52, 58–67, 68, 72, 75, 78, 85, 106, 115, 156, 158, 159, 160, 161, 162, 164, 168, 226, 239, 257, 266, 267, 296, 302, 313, 314, 320, 321–322, 323, 333, 348
Heath-Jones, 28n
hel, 123, 311
Hellmuth, Nicholas, 62, 154n, 229, 270, 288
Hellmuth Photographic Archive, 169
Hero Twins, 83, 90–91, 92, 93, 160, 209, 234, 235, 239, 260–276, 278, 281, 286, 294, 315, 316, 344
hieroglyphic text, 8, 11, 15, 20, 28, 35, 36, 40, 41, 57, 58, 65–66, 70–72, 75–76, 95, 97, 105, 108, 109–147, 148–151, 152, 155, 167, 168, 171, 172, 175–177, 181, 182, 183, 184, 187–188, 189–190, 201, 253, 276, 277, 297–298, 302–308, 310–313, 315, 321, 322
Highlands, 38, 39, 44, 56, 57, 87, 96, 147n, 155, 324, 337
Hofling, Charles, 128
Holmul, 154, 155, 160
Houston, Stephen, 97n, 182n
Huaxteca, 147n
Hunahpu. *See* Hero Twins
Hun-Hunahpu, 267

IL, 158, 159, 162, 166, 168
ik, 156, 158, 159, 160, 161, 164, 168, 289, 290, 302
imix, 280, 301
Initial Series, 25, 35, 42, 149, 160, 278
Itza (language), 128, 129
Itzamna/Itzam Na, 277, 288
ix, 76, 262
Ixlu, 184, 187, 188, 189, 190, 192, 193, 203, 219, 221
Ix-Tziu-Nene, 333–334
Izapa/Izapan, 6, 7, 8, 9, 11, 15, 16, 18, 20, 22, 24, 25, 26, 34, 35, 36, 37, 38, 40, 41, 56, 72, 73, 96, 97, 115, 148, 152, 163, 164, 167n, 172, 228

J-scroll, 53, 56, 72, 73, 80
jade, 35, 73, 83, 95, 98, 99, 100, 105–108, 116, 128, 144, 146, 148, 149, 164, 198, 223, 224, 225, 233, 234
jaguar, 12, 20, 28, 38, 51, 53, 58, 59, 67, 70, 72, 78, 97, 189, 190, 229, 230, 234, 235, 249, 250,

253, 257, 261, 262, 267, 270, 273, 281, 289, 298, 302, 315, 332, 335, 337, 340
Jaguar God, 54, 64, 66, 68, 69, 70, 181, 189, 232, 249, 253, 256, 274, 275, 288, 302, 315, 337
Jaina, 85, 162, 175, 176, 333, 335
Jester God, 58–61, 66, 85, 116, 136, 137, 139, 160, 249, 267, 270, 313
Jimbal, 184, 187, 188, 189, 190, 192, 193, 203, 219, 221
Joralemon, David, 175, 182, 225, 226, 346
Jupiter, 274
Justeson, John, 75n, 132n, 134n, 135, 137, 147n, 150, 201
Justeson and Norman, 136, 137

Kaminaljuyu, 6–43, 56, 97, 115, 124, 149, 152, 164, 171, 172, 230, 231, 322n
kan/k'an, 15, 117, 161, 173, 182, 183, 193, 198, 212, 279, 280, 284. See also *caan, chan*
katun, 115, 129, 178, 307n
Kaufman, Terrence, 147
Kaufman and Norman, 140
Kellers, James, 333
Kelley, David, 83, 130, 134, 138, 147n, 175, 315
Kerr, Justin, 278
Kidder, Alfred, 98, 99, 100, 101
Kidder and Ekholm, 96, 99, 104
Kidder, Jennings, and Shook, 20
Kidder, Tristram, 99
Kimbell Art Museum, 256–258, 263, 276
kin/k'in, 15, 16, 25, 67, 68, 70, 71, 72, 75, 76, 78, 116, 143, 166, 169, 190, 192, 193, 201, 212, 279, 288, 302, 314
Kirkpatrick, Muriel, 100
Kohunlich, 53, 54, 60, 61, 62, 73, 75, 76, 77, 169
Komchen, 49, 50
Kubler, George, 75, 160n, 161
Kuna-Lacanja, 115

La Amelia, 302
Lacandon, 128, 230
Laguna Francesca, 146
Laguna San Diego, 42
La Isla, 40
Lamanai, 45, 49, 50, 51, 53, 54, 55, 61, 62, 68, 70, 83, 93
lamat, 75, 76
Landa, Diego de, 131n, 177, 225, 228, 229, 249, 319, 327, 331n, 334, 340
La Pasadita, 178, 180, 181, 187
Las Casas, 225, 233
Late Classic, 10, 16, 62, 64, 66, 74, 76, 78, 83, 96, 124, 125, 143, 146, 152, 156, 157, 159, 160, 161, 162, 165, 166, 167, 169, 170, 171, 172, 189, 203, 204, 212, 221, 223, 224, 227, 229, 232, 233, 260–271, 275, 294, 315, 318, 335, 336, 342, 344, 345, 348, 349
La Venta, 220–221
Leach, Edmund, 89
Leiden Plaque, 40, 41, 42, 59, 60, 62, 63, 66, 69, 72, 85, 96, 115, 117, 148, 149, 155
León, Juan de, 274
litter, 9, 325
Loltun, 40
Long Count, 7, 57, 87, 129, 160, 176, 294, 307, 308
long-lipped/nosed/snouted god, 12, 38, 51–55, 61, 67, 80, 82, 85, 91, 115, 116, 123, 132, 142, 159, 168, 208, 209, 210, 226, 343
Lothrop, Samuel, 31, 32
Lounsbury, Floyd, 83, 116, 117, 228, 263, 271, 274, 303, 305, 310, 315, 316, 337
Love, Bruce, 132
Lowlands, 6, 7, 10, 26, 35, 39, 41, 43, 44, 45, 49, 50, 56, 57, 67, 87, 88, 89, 90, 91, 93, 95, 97, 117, 122, 126, 128, 131, 137, 140, 143, 144n, 146, 147, 148, 149, 150, 155, 218, 222, 228, 229, 231, 232, 234
Lunar Goddess. *See* Moon/Moon Goddess
Lunar Series, 124, 129, 145

MacLeod, Barbara, 118n
Madrid Codex, 146
mah, 71, 116
maize/maize god, 111, 225, 226, 227, 299, 341. *See also* corn, Corn God
Makara, 278
mal, 131, 188
Mam (god), 323, 324
Mam (language), 138n, 148n
Manuscript of 1558, 226, 231
Martyr, Peter, 177, 178
mask, 12, 16, 36, 37, 38, 39, 42, 43, 44, 45, 47, 50–55, 58, 60, 67, 77, 81, 83, 95, 97, 106, 115, 166, 169, 219, 224, 298, 323, 325
Mathews, Peter, 97n, 115, 128, 131, 134n, 139, 144, 189, 303, 307, 310, 312
Mathews and Justeson, 136
Mathews and Schele, 136
"Matisse" stela, 37
Maxcanu, 262, 263
Mayan languages, 83, 95, 108, 109, 110, 117, 119, 120–122, 124, 125, 126, 128, 131, 133,

Mayan languages (*cont.*)
137n, 138n, 141–142, 143, 144n, 146, 147, 148, 149, 150, 188, 301, 348
Mayapan, 106
"Meso-Amerikaanse Kunst," 152
Metropolitan Museum of Art, 70, 247, 249, 250, 253, 263, 272, 316
Mexican (Central), 7, 42, 43, 181, 215, 227, 231, 232, 319, 331–332, 340, 348
Mictlan/Mictlantecuhtli, 226, 231
Middle Classic, 7, 16, 20, 22, 41, 42, 70, 316
Miles, Suzanne, 24, 25, 28, 32, 42, 225
Milky Way, 274
Miller, Arthur, 106
Miller, Jeffrey, 228
Miller, Mary, 181, 228, 233, 335, 337
Miraflores, 6, 7, 9–12, 14, 18, 20, 22–34, 35, 38–40, 97
mirror, 37, 137, 215, 224, 225, 227–228, 233, 234, 267, 288, 303, 306, 332
Mixcoatl, 332
Mixe-Zoquean, 148
Mixtec, 332, 340, 341, 350
Moan/Muan Bird. *See* owl
monkey, 16, 239, 249, 250, 288
monster, 158, 159, 162, 167
Monte Alban, 14, 18, 36, 37, 332–333
Monte Alto, 12, 13
month patron, 115
monuments, 115
Moon/Moon Goddess, 16, 18, 23, 125, 158, 273, 277, 278, 288, 293, 304, 305, 316
Mopan, 128, 129
Morales, Moises, 234
Morelos, 22
Motagua, 42
Motolinía, 227
Motul dictionary, 128, 137, 138
murals, 8n, 38, 39, 40, 159, 168, 169, 171, 181, 231, 298, 318–330, 337
Museo Nacional, Guatemala, 32
Museo Nacional de Antropología, Mexico, 55, 62
Museum of the American Indian, 257–258
music, musician, 124, 125, 132, 140, 145, 146, 156, 159, 165, 167, 173, 231, 249, 318–330, 335, 337, 338

na, 190, 301, 304, 318
Naranjo, 70, 83, 84, 175, 176, 190, 191, 192, 215, 217
National Geographic, 296
National Museum of Natural History, 35
Nebaj, 118, 228, 231, 233
nen, 165, 166, 173, 227, 228, 267
New Year, 131n, 132, 337, 340, 345, 346
Nine Lords of the Night [earth], 137, 182, 208, 232, 323
Nohmul, 105, 106, 107, 108, 116, 144, 146
Norman, Garth, 24, 72
nose ornaments, 11, 16, 18, 20, 30, 35, 40, 156
November Collection, 162, 165n

Oaxaca, 14, 18, 36, 37, 38
obsidian, 98, 224, 227, 228, 232, 234
Ochpaniztli, 347
offerings, 145, 171, 223, 230, 233, 322n, 340, 341
Olmec, Olmecoid, 6, 12, 38, 44, 56, 60, 87, 90, 91, 97, 106, 146, 150, 221, 225
owl, 263, 288, 343

Pacific coast/slopes, 6, 12, 30, 34, 36, 38, 39, 96
Paddlers, 76, 182, 189–193, 203, 212, 315
Palenque, 57, 58, 59, 60, 62, 63–67, 70, 71, 72, 73, 78–80, 82, 83, 84, 92, 124, 130, 135, 136, 137, 143, 145, 161, 162, 166, 168, 169, 170, 171, 172, 182, 192, 193–195, 197–202, 203, 209, 210, 215, 222, 226, 227, 231, 234, 266, 267, 271–272, 274, 277, 280, 288, 289, 294, 296, 298, 299–308, 311–312, 313–316, 345
Palenque Mesa Redonda, 260, 271
Palenque Triad, 63, 65–67, 68, 70, 71, 72, 73, 74, 75, 83, 84, 85, 86, 91, 92, 193, 239, 249, 260, 262, 263, 267, 271, 272, 273, 274, 275, 276, 289, 298, 302, 304, 305, 307, 308, 311–317, 321, 337
Parsons, Lee, 333n
patron gods, 115, 161, 279, 296, 320
Pauahtun, 203, 230
Paul, Anne, 342
Pax God/ceremony, 279, 296, 334, 335, 336, 337, 338, 340, 343
Pax, Mary, 83
Pearlman Collection, 154, 169, 170, 257–258
Pendergast, David, 232, 233
Pennsylvania State University Kaminaljuyu Project, 15, 26
Period ending, 178, 181, 183, 188, 189, 190, 192, 193, 205, 206
Peten. *See* El Peten
Piedras Negras, 73, 83, 129, 130–135, 136, 139, 148, 175, 176, 195, 196, 202, 203, 204, 209, 210, 303, 336, 341–346, 347, 348, 349, 350, 351
"Po Panel," 140, 141, 148

Pokom, 223, 225, 233
Polol, 22, 36, 41
Pomona, 94, 95, 97, 98–108, 109, 110, 111, 113, 115, 116, 119, 120, 122, 126, 128, 129, 134, 136, 139–151
Popol Vuh, 18, 83, 91, 92, 232, 260–274, 278, 294, 315
Postclassic, 83, 106, 111, 115, 126, 146, 152, 163, 229, 277, 319, 332, 333, 336, 340, 345, 348
Post-Olmec, 6, 9, 10, 12, 37
pottery, 14, 22, 24, 36, 40, 46, 63–64, 98, 100–105, 106, 107, 108, 150, 152–155, 159, 160n, 166, 168, 171, 223, 224, 229–230, 231–232, 233, 234, 235, 236–259, 260–276, 277–293, 294, 299, 301, 313, 315, 321, 325–330, 333, 338, 342, 345
Preclassic (Late or Terminal), 6–12, 15, 18, 24, 26, 28, 32, 34, 35, 36, 37, 38, 39, 41, 42, 44–57, 58, 60, 61, 62, 64, 65, 67, 68, 69, 73, 76, 78, 80, 83, 84, 85, 86, 87, 88, 89, 90, 91, 93, 94, 95, 96, 97, 98, 100, 101, 104, 105, 106, 107, 108, 115, 116, 124, 129, 130, 142, 143, 144, 145, 146, 148, 149, 150, 152, 163, 172, 173, 221, 228, 230, 231, 263, 267, 343
Prem, Hanns, 96
Primary Standard Sequence, 150, 158, 253, 281, 288, 289, 296
Princeton Conference, 302n
Princeton Painter, 229, 246
Princeton University Art Museum, 168
Princeton Vase, 229, 236–238, 247
Principal Bird Deity, 78, 167
Pring, Donald, 105
Proskouriakoff, Tatiana, 22, 35, 106, 135, 136, 148, 160, 175, 178, 192, 195, 341
Protoclassic, 7, 9, 15, 18, 20, 22, 24, 28, 34, 35, 37, 39, 40, 41, 50, 89, 93, 101, 105
Proto-Maya, 6, 7, 8, 9, 11, 15, 20, 25, 35, 40, 41, 164
pyrite, 224, 228, 233, 332

Quadripartite Badge/God/Monster, 62, 63, 66, 75, 76, 78, 82, 84, 85, 160, 161, 166–167, 168, 169, 172, 193, 194, 195, 198, 199, 201, 203, 204, 206, 212, 214, 215, 302, 314, 343, 346, 347
Quetzalcoatl, 226, 231
Quiche, 91, 231, 278
Quichean (language), 307n
Quirarte, Jacinto, 9, 72, 148, 298
Quirigua, 58, 63, 159, 162, 166, 171, 204, 205, 206, 207, 212, 213, 215, 298, 302

rabbit, 16, 229
rain/Rain Beast/Rain God, 14, 127, 149, 278, 290, 329, 332, 333, 334, 337, 338, 344, 345, 350, 351
Rands, Robert, 345
Rappaport, Roy, 88
Recinos and Goetz, 331n
Recurved-Snout Monster, 160, 161
red pigment, 14, 26, 58, 233, 234
Rediscovered Masterpieces of Mesoamerica, 152
Reents, Dorie, 97
reptile, 159, 161, 162, 163, 164, 166, 168, 171, 173
Retalhuleu, 25, 164
Riese, Berthold, 139
Río Azul, 55, 124, 155, 162, 163, 167n, 168, 169
Río Candelario, 40
Río Hondo, 338, 339
ritual, 94, 130, 132, 144, 145, 175–221, 227, 230, 278, 281, 289, 291, 294, 296, 311, 314, 318, 331–351
Ritual of the Bacabs, 337, 341
Robertson, Merle. *See* Greene Robertson
Roosevelt, Anna, 257
Roys, Ralph, 334, 335
ruler/rulership, 58, 61, 62, 63, 64, 66, 67, 69, 73, 79, 83, 85, 86, 87, 91, 92, 94, 134, 136, 139, 140, 143, 144, 145, 146, 149, 169, 171, 173, 175–221, 222, 226, 227, 228, 233–234, 235, 263, 271, 272, 277, 280, 288, 294, 300, 302, 308, 312, 315, 319, 334, 343, 346, 348, 350, 351
Ruz Lhuillier, Alberto, 222, 234

S motif, 183, 184, 203, 204, 215
sacrifice, 38, 90, 91–92, 97, 124, 132, 144, 145, 146, 175–221, 225–227, 231, 239, 249, 257, 258, 260–276, 281, 313, 316, 331–351
Sacul, 189, 190
Sáenz Collection, 175, 176, 178
Sahagún, Fray Bernardino de, 225, 230
San Diego cliff carvings, 97, 115
San Estevan, 130
saurian, 74, 76, 78, 83, 156, 164, 320, 342
Saville, Marshall, 332, 344
Scaffold Vase, 333–335, 337, 338, 343
scattering, 129, 130, 133, 143, 145, 181, 182, 183–184, 187–188, 190, 192–193, 205, 206, 226
scepter, 25, 40, 73, 82, 85, 86, 183, 184, 206, 314
Schaffer, Anne-Louise, 322n
Schele, Linda, 75, 130, 131n, 134, 136, 137, 139,

Schele, Linda (*cont.*) 143, 154, 155, 162, 165n, 169, 175, 178, 190, 198, 199, 201, 226, 263, 270, 272
Schele and Miller, 276
Scott, John, 37
sculpture, 6–43, 44–45, 50–86, 93, 96, 115, 126, 161, 175–221, 299–316, 325–326, 341–350
Seibal, 206, 208, 209, 212
Seler, Eduard, 44, 147n, 182, 331, 332
serpent, 8, 14–15, 16, 18, 26, 40, 42, 57, 62, 66, 72–80, 83, 85, 86, 156, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 171, 173, 183, 195, 198, 199, 206, 208, 209, 210, 212, 213, 215, 216, 219, 221, 228, 278, 279, 281, 288, 302, 314, 315, 321, 343, 344, 345, 346, 347, 348
Serpent-bird/serpent-wing, 6n, 8, 14–15, 16, 25, 26, 28, 31, 39, 40, 62, 66, 167, 194, 195, 198, 209, 210, 278, 288
Sharer, Robert, 35
shell , 11, 12, 20, 34, 42, 66, 75, 98, 100, 106, 124, 132, 140, 145, 146, 160, 166, 168, 169, 172, 201, 224, 231, 233, 249, 266, 271, 300, 301, 308, 332, 338, 344. See also *Spondylus*
Shook, Edwin, 23, 24
Site Q, 161
skeletal/skeleton, 8, 9, 16, 53, 58, 64, 75, 163, 167, 168, 171, 172, 173, 183, 201, 215, 227, 229, 232, 263, 267, 270, 296, 298, 302, 344, 346, 347
sky/sky gods, 11, 18, 25, 57, 73, 74, 76, 79, 80, 115, 116, 117, 127, 142, 143, 190, 195, 206, 273, 274, 296, 297, 348
skyband, 8, 9, 36, 73, 83, 150, 160, 181, 194, 195, 198, 203, 206, 208, 212, 277–293, 345, 346, 347, 348
Slocum and Gerdel, 307n
Smith, A. Ledyard, 231
Spinden, Herbert, 193, 195, 198
Spondylus, 98, 100, 106, 107, 108, 181, 224, 233, 266, 343
stingray, 66, 75, 76, 98, 132n, 189, 215, 223–225, 226, 227, 229, 230, 233, 266, 267, 302, 314, 315
Stuart, David, 66, 73, 130, 131n, 226
Suchitepequez, 30
Sumerian, 150
Sun [God], 14, 16, 18, 67, 70, 71, 72, 75, 77, 80–82, 83, 85, 86, 91, 92, 111, 114, 116, 117, 120, 121, 123, 132, 138n, 142, 143, 144, 145, 149, 169, 181, 193, 201–203, 226, 232, 233, 273, 274, 275, 277, 278, 279, 288, 289, 290, 305, 314, 316
Tabasco, 40, 106, 220–221
Tamoanchan, 226
Tancah, 106
tau, 12, 20, 37, 52, 53, 54, 288
Temple University, 100
Teotihuacan, 7, 22, 43, 49, 93, 226, 322
Tepatlaxco, 37, 38
Tepeu phase, 167, 227
Tezcatlipoca, 215, 227, 228, 234
Thompson, J. Eric, 57, 96, 110, 123, 130n, 137, 145, 169, 176, 182, 226, 305, 318, 319, 322, 323, 324, 337, 345
ti, 190, 303
Tikal, 8n, 12, 15, 38, 39, 40, 42, 44, 46, 47, 49, 50, 51, 53, 55, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 76, 77, 80, 83, 85, 86, 106, 110, 112, 118, 124, 130, 136, 145, 154, 155, 159, 160, 161, 162, 163, 164, 166, 167, 168, 169, 172, 184, 189, 209, 210, 211, 212, 213, 218, 219, 228, 231, 233–234, 263, 280, 290, 294, 296, 298, 301, 302, 315, 316, 322n, 331, 336, 348–350
Tila, 137n
Tlacacaliliztli, 331, 332
Tlacaxipehualiztli, 331–333
Tlaloc, 42, 86
Tlatilco, 38
Tlaxcallan, 227
toad, 18, 163, 192, 249, 250, 253, 336, 338, 340, 342–343
Toci, 348
Tohcok, 334, 335n, 336, 343
Tolgom, 337, 341, 348
tomb. *See* burial
Tonina, 64, 190, 191, 312, 313, 346–348
tree, 9, 127, 163–165, 166, 167, 172, 198, 199, 201, 226, 234, 239, 267, 302, 308, 310, 331, 336, 337, 338, 341, 343, 348, 350
Tres Zapotes, 35, 36, 149
Troike, Nancy, 332
trophy head, 8, 28, 31, 35, 36, 38, 257, 258
tun, 144, 145, 148, 149, 178, 294, 307n, 310, 323, 324, 325, 335, 337, 343
Tup Kaak, 334–336, 338, 343, 351
turtle, 66, 139, 164, 165, 168, 172, 231, 318, 319, 320, 322, 323, 326, 327, 329, 330
Tuxtla Gutierrez Museum, 135
"Tuxtla Statuette," 35, 149n
Tzakol phase, 106, 140, 154–155, 156, 159, 160, 166, 168, 229, 230
Tzeltalan, 109, 122, 130n, 146, 147, 148, 307n
Tzimin Kax, 108

Tzotzil, 130n, 337
Tzutzuculi, 56

u cab, 192, 227, 228, 303, 305, 310
U element, 12, 18, 22, 23, 25, 26, 28, 31, 35, 67, 96, 126, 149, 168, 169, 198, 249
Uaxactun, 12, 34, 38, 41, 42, 44, 49, 51, 52, 53, 64, 67, 68, 83, 91, 148n, 154, 155, 159, 168, 227, 229, 230, 231
Uc, Melchor, 188
Ucanal, 183, 184, 186, 188, 189, 203, 219
uinal, 70, 336, 338
Underworld/Underworld Lords, 18, 23, 68, 75, 156, 201, 222, 223, 227, 229, 230, 231, 232, 234, 235, 249, 253, 256, 260–276, 278, 279, 280, 281, 288, 289, 291, 292, 293, 294, 298, 299, 302, 305, 314, 315, 316, 337
University [of Pennsylvania] Museum, 30
University of California at Los Angeles, 274
University of Pennsylvania, 44
Uolantun, 41, 42, 64
Usumacinta, 294

van Gennep, Arnold, 341n
Vase of the Seven Gods, 295–296
Venus, 82, 83, 85, 86, 91, 92, 167, 277, 278, 288
Veracruz, 36, 37, 38, 106, 341
Verbena phase, 7, 9, 10, 12, 24, 28
Vucub-x, 272
vulture, 70, 135, 338, 343

war/warrior, 18, 20, 24, 28, 32, 183, 184, 212, 215, 227, 257, 258, 332, 334, 335, 337, 338, 341, 350, 351
water, 86, 127, 130n, 163, 193, 195, 260, 261, 263, 271, 272, 274, 300–301, 302n, 308, 313, 314, 334, 343, 344, 345
"water group," 184, 307
waterlily, 66, 86, 267, 276, 301, 302n, 323
Waterlily Jaguar, 66, 76, 261, 262, 263, 267, 270, 271, 273, 276
weapons, 32, 37, 40, 42, 184, 212, 232, 239, 267, 272, 331, 332, 333, 334, 337, 338, 348, 350
Wetherington, Ronald K., 7, 10
Wray Collection, 166

Xbalamque/Xbalanque. *See* Hero Twins
Xcalcumkin, 118
Xibalba. *See* Underworld/Underworld Lords
Xipe Totec, 331–333, 341
xoc, 303, 315
Xochipala, 38
Xul, 115
Xultun, 64

Yalloch, 338, 339
yax, 66, 80, 182, 194, 198, 199, 201, 210, 306, 307
Yaxchilan, 58, 75, 83, 85, 112, 130, 134, 139, 143, 145, 163, 168, 169, 173, 176, 177, 178, 179, 181, 182–183, 184, 185, 186, 187, 189, 193, 208, 209, 210, 212, 215, 216, 219, 294, 296, 298, 299, 303, 310, 312
Yaxha, 64, 163, 164, 168, 169, 205–206
Young Lords. *See* Hero Twins
Yucatan/Yucatec, 40, 49, 146, 225, 227, 228, 229, 231, 262, 319, 324, 333, 335, 336, 337, 338, 340, 341
Yucatecan (language), 73, 80, 94, 95, 109, 122, 126, 128, 129, 130n, 133, 134, 137, 138, 146, 147, 148, 149, 218, 226, 306, 307n, 334, 337, 348

zac, 304
Zacitznun, 341
Zapotec, 36, 332, 333, 343
"Zegache" vase, 14
Zip, 160, 161
"Zip Monster," 58, 160, 161, 195